CONSTRUCTION NEWS

Supplement to ENGINEERING NEWS. New York, April 5, 1906.

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CONSTRUCTION NEWS.

PLANS AND SPECIFICATIONS ON FILE.

The following Plans (P.), Specifications (S.), and Bidding Sheets (B. S.) may be seen at the office of The Engineering News Publishing Co., 220 Broadway, New York:

Bids close.	Work.	Place.	On file.	See issue.
Apr.				
5	Wharves	Manila, P. I	P. & S.	12-14
7	R. R. track scale	Portsmth, N.H.	S.	3- 8
•9	Wharf	Guantanamo, Cuba	P. & S.	2-22
10	Water-wks, etc.	Hattiesburg, La.	S.	3-29
•10	Sewers	New Britain, Conn	P. & S.	3-29
•11	Sewers	Georgetown, Ky	S. & B. S.	3- 8
11	Intake pipe	Auburn, N. Y	S.	3-15
12	Cement	Glendive, Mont	S.	3- 8
•12	Dam	Carlsbad, N. Mex	P. S. & B. S.	3- 8
•12	Main canal, etc.	Glendive, Mont.	P. S. & B. S.	3- 8
14	Paving	Green Bay, Wis	S. & B. S.	3- 8
14	Wharf	Charleston, S. C	S.	3-22
•15	R.R. grading	Wisconsin Cen. Ry.	P. & S.	4- 5
•16	Main canal	Boise, Idaho	P. S. & B. S.	3- 8
16	**Light & power plant**	**New York.**	**P. S. & B. S.**	**2-22**
19	Suction dredges	Panama	S.& B. S.	3-15
•19	Sewers	Pensacola, Fla	P. S. & B. S.	3-22
•10	Paving, etc.	Hattiesburg, Miss.	S. & B. S.	3-29
•19	Irrigation ditches	Hazen, Nev.	P. S. & B. S.	3-15
26	Engines	Philadelphia, Pa	S.	3-22
28	Building	Portsmouth, N. H.	S.	3-29
28	Building	Charleston, S. C	S.	3-22
May				
•2	Telephone system	Salt Lake City, Utah	S. & B. S.	3-15
4	**Wharf sheds & Rys.**	**Manila, P. I.**	**P. & S.**	**3- 1**
Sept.				
15	Hotel bldg.	Manila, P. I	S.	3-29

•Work advertised in Engineering News.

LIST OF CONTRACTS PENDING.

Bids close. Work. Place. On file. See issue.

LIGHT, HEAT AND POWER PLANTS.

Apr. 9.Light & power plant, Fullerton, Cal....Mar. 1
Apr. 9.Light plant, Rockmart, Ga..............Mar. 29
Apr. 10.Power plant, Danville, Pa..............Mar. 22
Advertised. Eng. News, Mar. 22 and 29.
Apr. 14.Light plant, Grand Island, Neb..........Mar. 29
Apr. 14.Electric light system, Fort Russel, Wyo..Mar. 22
Apr. 14.Light system, Omaha, Neb..............Apr. 5
Apr. 16.Light & power plant, New York. N. Y..Feb. 22
Apr. 19.Light plant improvements, Palo Alto, Cal.Apr. 5
Apr. 23.Light plant, Grand Island, Neb..........Apr. 5
May 28.Elec. power plant, Garden City, Kan..Apr. 5
Advertised, Eng. News, Apr. 5 to May 10.
Apr. 30.Power plant for sale, Erindale, Ont....Mar. 22
Advertised, Eng. News, Mar. 22 to Apr. 5.
No date.Gas pipe line, Cincinnati, O...........Feb. 15
No date.Power plant, Goodwater, Ala............Mar. 1
July 5.Water power for sale, Kenora, Ont....Mar. 15
Advertised, Eng. News, Mar. 15.

BRIDGES.

At once.Bridge testings, engineer, Pine Bluff, Ark.Apr. 5
Advertised, Eng. News, Apr. 5.
Apr. 5.Bridges, Fort Pierre, S. Dak............Mar. 29
Apr. 6.Bridges, Goldendale, Wash..................Mar. 8
Apr. 6.Ferry bridges, New York, N. Y.........Mar. 29
Apr. 6.Bridge, Tacoma, Wash....................Mar. 29
Apr. 7.Bridge, O'Neill, Neb......................Mar. 29
Apr. 9.Bridge, St. Anthony, Idaho..............Apr. 5
Apr. 10.Steel bridge, Coeur D'Alene, Idaho......Mar. 15
Apr. 12.Bridges. Bigtimber, Mont...............Apr. 5
Apr. 12.Widening bridge, New York, N. Y......Apr. 5
Apr. 16.Bridge, Minneapolis, Minn..............Apr. 5
Apr. 20.Bridge, Reading, Pa......................Apr. 5
Advertised, Eng. News, Apr. 5.
Apr. 21.Bridge repairs, Memphis, Tenn...........Apr. 5
Apr. 28.Bridges, Garden City, Kan.............Mar. 29
Advertised, Eng. News, Mar. 29 to Apr. 19.
Apr. 30.Iron draw-bridge, Belzona, Miss.........Mar. 15
Advertised, Eng. News, Mar. 15 to Apr. 19.

BUILDINGS.

Apr. 5.School, Buffalo, N. Y.........................Mar. 29
Apr. 5.Library, San Mateo, Cal.....................Mar. 22
Apr. 5.Court-house, Newton, Kan..................Mar. 15
Apr. 6.Court-house, Ocala, Fla......................Mar. 22
Apr. 6.Mosaic ceilings, New York, N. Y.........Mar. 29
Apr. 7.Building, Seattle, Wash...................Mar. 29
Apr. 9.School, Trenton, N. J.......................Mar. 29
Apr. 10.Hotel, Fernandina, Fla....................Mar. 22
Apr. 10.Buildings, New York, N. Y...............Mar. 15
Apr. 10.Depot, Red Wing, Minn....................Apr. 5
Apr. 11.School, Donaldsonville, Fla..............Mar. 29
Apr. 14.Lighting fixtures, Cheyenne, Wyo.......Mar. 15
Advertised, Eng. News, Mar. 15 to 29, Apr. 12
Apr. 14.Hospital, storehouse, Delaware City, Del.Mar. 22
Apr. 14.School, Greenwich, N. Y...............Apr. 5
Apr. 16.Shelters, Delaware City, Del...........Mar. 22
Advertised, Eng. News, Mar. 22 to Apr. 5.
Apr. 16.School, Cleveland, O.......................Mar. 29
Apr. 17.Building, Tallahassee, Fla...............Mar. 29
Apr. 19.Asylum, Bathgate, N. Dak.................Apr. 5
Apr. 21.Mech equipment, Washington, D. C.....Mar. 22
Advertised, Eng. News, Mar. 22 to Apr. 12.
Apr. 25.Church, Bowling Green, O...............Apr. 5
Apr. 28.Building, Charleston, S. C...............Mar. 22
Apr. 28.Building, Portsmouth, N. H...............Mar. 29
May 1.Barracks, Cheyenne, Wyo...............Apr. 5
Advertised, Eng. News, Apr. 5 to 26.
May 1.Elevator, fixtures, etc., Wash., D. C.....Apr. 5
Advertised, Eng. News, Apr. 5 to 26.
May 4.Hospital, Prescott, Ariz...................Apr. 5
Advertised, Eng. News, Apr. 5 to 26.
Sept. 15.Hotel, Manila, P. I.......................Mar. 29

WATER SUPPLY AND IRRIGATION.

Apr. 9.Cast-iron pipe, Orange, N. J............Mar. 22
Advertised, Eng. News. Mar. 22 and 29.
Apr. 9.Engine, Joliet, Ill..........................Apr. 5
Apr. 10.Laying water mains, Cincinnati, O......Mar. 22
Apr. 10.Water-works extens'n, Hattiesburg, Miss.Mar. 29
Advertised, Eng. News, Mar. 29.
Apr. 11.Water meters, Portland, Ore...........Mar. 29
Apr. 11.Intake pipe, Auburn, N. Y.............Mar. 15
Advertised, Eng. News, Mar. 15 to Apr. 4.
Apr. 11.Water mains, Salt Lake City, Utah.....Mar. 15
Advertised, Eng. News, Mar. 15 to 29.
Apr. 11.Boiler plant, Brooklyn, N. Y...........Apr. 5
Apr. 11.Water mains, New York, N. Y..........Apr. 5
Apr. 12.Pumping station, Lima, O...............Apr. 5
Apr. 12.Pump, Yonkers, N. Y.....................Mar. 22
Advertised, Eng. News, Mar. 22.
Apr. 13.Water extension, Ft. Meyer, Va.......Mar. 22
Apr. 14.Sewer & water systems, Honolulu, H. T.Mar. 15
Apr. 14.Water mains, New York, N. Y.........Apr. 5
Apr. 16.Filter extension, Columbus, Ind........Mar. 15
Apr. 16.Artesian well, Galesburg, Ill...........Mar. 15
Advertised, Eng. News, Mar. 15.
Apr. 16.Infiltration gallery, Columbus, Ind......Mar. 22
Advertised, Eng. News, Mar. 22.
Apr. 16.Water tank, Athens, Ala..............Mar. 29
Apr. 17.Water pipe line, Bayonne, N. J........Apr. 5
Advertised, Eng. News, April 5 and 12.
Apr. 18.Water pipe, Asbury Park, N. J.........Mar. 29
Advertised, Eng. News, Mar. 29 and Apr. 5.
Apr. 18.Removing stand-pipe, Donaldsonville, La.Apr. 5
Apr. 24.Water system, Roff, Ind. T............Mar. 29
Advertised, Eng. News, Mar. 29 to Apr. 12.
Apr. 26.Engines, etc., Philadelphia, Pa........Mar. 22
Advertised, Eng. News, Mar. 22 and 29 and Apr. 19.
Apr. 26.Pumping engine, Bowling Green, Ky...Apr. 5
Advertised, Eng. News, Apr. 5 to 19.
Apr. 27.Pumps, Cincinnati, O....................Apr. 5
May 1.Well, Waterloo, Ia........................Apr. 5
May 1.Drilling deep well, Waterloo, Ia........Mar. 29
Advertised, Eng. News, Mar. 29 and Apr. 5.
May 1.Water pipe, Toronto, Ont..............Mar. 29
Advertised, Eng. News, Mar. 29 to Apr. 12.
May 15.Water pipe, New Orleans, La............Apr. 5
No date.Dam, Marietta, Ga.......................Mar. 29
No date.Water-works franchise, Cloquet, Minn...Mar. 29
No date.Irrigation ditch, Harlingen, Tex.........Mar. 29

SEWERAGE.

Apr. 5.Sewers, Paterson, N. J.................Mar. 22
Apr. 5.Trunk sewers, Salem, Mass...........Mar. 22
Advertised, Eng. News, Mar. 22 and 29.
Apr. 5.Sewer pipe, Boise City, Idaho..........Mar. 22
Advertised, Eng. News, Mar. 8 to 29.
Apr. 5.Sewers, Birmingham, Ala..............Mar. 29
Apr. 5.Sewers, Buffalo, N. Y....................Mar. 29
Apr. 5.Sewers, Boston, Mass..................Apr. 5
Apr. 6.Sewers and paving, East Pittsburg, Pa..Apr. 5
Apr. 6.Sewer, Dayton, O.......................Apr. 5
Apr. 7.Sewer, Ashtabula, O....................Apr. 5
Apr. 7.Sewer, Cleveland, O....................Mar. 29
Apr. 9.Sewers, Oskaloosa, Ia..................Mar. 29
Apr. 10.Sewers, New Britain, Conn............Mar. 29
Advertised, Eng. News, Mar. 29 and Apr. 5.
Apr. 10.Sewers, Hattiesburg, Miss..............Mar. 29
Advertised, Eng. News, Mar. 29.
Apr. 10.Sewers, Cleveland, O....................Apr. 5
Apr. 11.Sewers, New York, N. Y.................Apr. 5
Apr. 11.Storm sewer, Marion, O...............Apr. 5
Apr. 11.Sewers, Pipestone, Minn..............Mar. 29
Apr. 11.Storm sewers, Ann Arbor, Mich........Mar. 29
Apr. 11.Pipe sewers, Salt Lake City, Utah........Mar. 15
Advertised, Eng. News, Mar. 15 to 29.
Apr. 11.Sewers, Georgetown, Ky..................Mar. 8
Advertised, Eng. News, Mar. 8.
Apr. 14.Sewers, Roanoke, Va....................Mar. 29
Apr. 12.Sewer, Ft. Wayne, Ind.................Apr. 5
Apr. 12.Sewer system, Milledgeville, Ga........Apr. 5
Apr. 16.Sewers, Des Moines, Ia.................Apr. 5
Apr. 16.Sewers, Oshkosh, Wis....................Mar. 29
Apr. 19.Sewers, Pensacola, Fla..................Mar. 8
May 8.Sewers, New Orleans, La..................Mar. 8
Advertised, Eng. News, Mar. 8 to May 8.
June 26.Sewer, Vacaville, Cal.......................Apr. 5

STREETS AND ROADS.

Apr. 5.Granite paving blocks, New York, N. Y..Mar. 29
Apr. 5.Roads, Chandler, Okla..................Mar. 29
Apr. 5.Curbing and sidewalks, Charleston, S. C.Mar. 29
Apr. 5.Sidewalks, New York, N. Y............Mar. 22
Apr. 5.Gravel roads, Hebron, Conn...........Mar. 29
Apr. 6.Paving and curb, Plattsburg, N. Y......Mar. 29
Apr. 6.Sidewalk composition, Holyoke, Mass....Mar. 22
Advertised, Eng. News, Mar. 22.
Apr. 6.Sidewalks, Lebanon, O....................Mar. 22
Apr. 7.Street improvements, Stevens Point, Wis.Mar. 22
Apr. 7.Asphalt paving, Grand Rapids, Mich.....Mar. 29
Apr. 7.Improving streets, Cleveland, O.........Mar. 29
Apr. 9.Paving, Lansing, Mich.....................Mar. 29
Apr. 9.Gravel roads, Valparaiso, Ind..........Mar. 29
Apr. 9.Road work, San Francisco, Cal.........Mar. 22
Apr. 9.Paving, Binghamton, N. Y...............Mar. 22
Advertised, Eng. News, Mar. 22 and 29.
Apr. 9.Macadam road, Concord, N. H.........Apr. 5
Apr. 9.Concrete and granolithic work, Lynchburg, Va ....Apr. 5
Apr. 9.Paving, Ashland, Ky....................Apr. 9
Apr. 9.Paving, Alton, Ill.........................Apr. 5
Apr. 10.Sidewalks, Opelousas, La..............Mar. 22
Apr. 10.Paving & curbing, Hattiesburg, Miss...Mar. 29
Advertised, Eng. News, Mar. 29.
Apr. 10.Paving, Watertown, Wis...............Mar. 29
Apr. 11.Road machines, Houma, La.............Mar. 29
Apr. 11.Cement sidewalks, Salt Lake City, Utah.Mar. 15
Advertised, Eng. News, Mar. 15 to 29.
Apr. 11.Grading & paving, Salt Lake City, Utah.Mar. 15
Advertised, Eng. News, Mar. 15 to 29.
Apr. 11.Grading, curbing, New York, N. Y......Apr. 5
Apr. 11.Grading, etc., Marion, O................Apr. 5
Apr. 11.Sidewalks, etc., South Bend, Ind.......Apr. 5
Apr. 12.Constructing road, Stroudsburg, Pa....Apr. 5
Apr. 12.Macadamizing, Union City, Ind..........Apr. 5
Apr. 12.Cement, Brandon, Man.................Mar. 22
Apr. 14.Paving, Green Bay, Wis.................Mar. 22
Advertised, Eng. News, Mar. 22 and 29.
Apr. 14.Road work, Steubenville, O.............Mar. 29
Apr. 14.Paving and sidewalks, Roanoke, Va.....Mar. 29
Apr. 15.Sidewalks, North Branch, Mich........Mar. 29
Apr. 16.Stone roads, Rensselaer, Ind...........Mar. 29
Apr. 16.Sidewalks, Bismark, N. Dak...........Mar. 22
Apr. 16.Road roller, Melrose, Mass..............Apr. 5
Advertised, Eng. News, Apr. 5.
Apr. 16.Paving and curbing, Des Moines, Ia......Apr. 5
Apr. 16.Paving, Delaware, O....................Apr. 5
Apr. 16.Paving, Bradford, Pa...................Apr. 5
Advertised, Eng. News, Apr. 5 and 12.
Apr. 17.Paving, La Crosse, Wis.................Mar. 22
Apr. 17.Paving, Bayonne, N. J..................Apr. 5
Apr. 17.Paving, Bayonne, N. J..................Apr. 5
Advertised, Eng. News, Apr. 5 and 12.
Apr. 19.Brick paving, Paris, Tex...............Mar. 22
Advertised, Eng. News, Mar. 22.
Apr. 20.Paving and grading, Keyser, W. Va..Apr. 5
Apr. 25.Paving, West Tampa, Fla.............Apr. 5
Advertised, Eng. News, Apr. 5 to 19.
No date.Sidewalks, Oberlin, Kan...............Mar. 29

MISCELLANEOUS CONTRACTS.

At once.Steam shovel work, New York, N. Y..Mar. 29
Advertised, Eng. News, Mar. 29.
Apr. 5.Wharves, Manila, P. I....................Dec. 14
Apr. 5.Seawall, San Francisco, Cal...........Mar. 22
Apr. 6.Ditches, Northwood, Ia.................Mar. 22
Apr. 6.Coal-handling plant, Chicago, Ill.......Mar. 22
Apr. 6.Drainage ditch, Spencer, Ia............Mar. 29
Apr. 7.Jetties, Cleveland, O...................Mar. 22
Apr. 7.R. R. track scale, Portsmouth, N. H......Mar. 8
Apr. 9.Wharf, Guantanamo, Cuba.............Feb. 22
Advertised, Eng. News, Feb. 15 and 22.
Apr. 9.Street signs, Schenectady, N. Y.........Mar. 1
Advertised, Eng. News, Mar. 1.
Apr. 9.Electric railroad, San Francisco, Cal.....Mar. 15
Apr. 9.River wall, etc., Philadelphia, Pa......Apr. 5
Apr. 10.Various naval supplies, Wash., D. C....Apr. 5
Apr. 10.Dam, cribs, etc., Cincinnati, O..........Mar. 15
Advertised, Eng. News, Mar. 15 to Apr. 5.
Apr. 10.Engines, boilers, Wheeling, W. Va......Mar. 29
Advertised, Eng. News, Mar. 29 and Apr. 5.
Apr. 10.Concrete abutments, Hattiesburg, Miss..Mar. 29
Advertised, Eng. News, Mar. 29.
Apr. 11.Jetty, Cleveland, O.......................Mar. 29
Apr. 12.Canal, Glendive, Mont...................Mar. 15
Advertised, Eng. News, Mar. 15 to Apr. 5.
Apr. 12.Cement, Glendive, Mont..................Mar. 8
Apr. 12.Main canal, Glendive, Mont..............Mar. 8
Advertised, Eng. News, Mar. 8 to 29.
Apr. 12.Dam, Carlsbad, N. Mex..................Mar. 8
Advertised, Eng. News, Mar. 8.
Apr. 14.Wharf, Charleston, S. C...............Mar. 22
Apr. 14.Dredging, Ottawa, Ont...................Mar. 29
Apr. 14.Dredging, Port Arthur, Ont..............Mar. 29
Apr. 15.R. R. equipment, E. Carolina Ry......Mar. 22
Apr. 15.Railroad grading, Wisconsin Central R R.Apr. 5
Advertised, Eng. News, Apr. 5 to 26.
Apr. 16.Dredging, Boston, Mass..................Mar. 22
Advertised, Eng. News, Mar. 22 to Apr. 12.
Apr. 16.Main canal, Boise, Idaho.................Mar. 8
Advertised, Eng. News, Mar. 8 to 29.
Apr. 19.Suction dredges, Panama.................Mar. 15
Apr. 19.Irrigation ditches, Hazen, Nev..........Mar. 15
Advertised, Eng. News, Mar. 15 to Apr. 5.
Apr. 20.Ditch, Elgin, Ill.........................Apr. 5
Apr. 20.Sea wall, Coronado, Cal................Apr. 5
Apr. 23.Dredging, Jacksonville, Fla............Apr. 5
Advertised, Eng. News, Apr. 5 to 19.
Apr. 25.Railroad work, Kanawha & W. Va......Apr. 5
Advertised, Eng. News, Apr. 5 to 26.
Apr. 25.Rock removal, New York, N. Y........Mar. 29
Advertised, Eng. News, Mar. 29 to Apr. 19.
Apr. 25.Ry. concrete msnry, etc., Baltimore, Md.Mar. 29
Advertised, Eng. News, Mar. 29 to Apr. 12.
Apr. 28.Cement, Wheeling, W. Va.............Apr. 5
Advertised, Eng. News, Apr. 5 to 26.
May 1.Steel dock, Chile (Foreign) ....Nov. 9
May 2.Telephone system, Salt Lake City, Utah.Mar. 15
Advertised, Eng. News, Mar. 15 to Apr. 5.
May 2.Revetments, Chicago, Ill.................Apr. 5
Advertised, Eng. News, Apr. 5 to 26.
May 2.Steel tug, Duluth, Minn.................Apr. 5
Advertised, Eng. News, Apr. 5 to 26.
May 4.Wharf sheds & Rys., Manila, P. I......Mar. 1
Advertised, Eng. News, Mar. 15 to 29.
May 10.Dam, Billings, Mont...................Apr. 5
Advertised, Eng. News, Apr. 5 to 26.
June 2.Two battleships, Washington, D. C......Apr. 5
June 6.Dredging plant, Cuba...................Apr. 5
Advertised, Eng. News, Apr. 5 to May 31.
No date.Brick, terra cotta, Lowell, Mass.........Mar. 1
Advertised, Eng. News, Mar. 1.
No date.Cement, Chicago, Ill.....................Mar. 15
Advertised, Eng. News, Mar. 15.

CIVIL SERVICE EXAMINATIONS.

At once.Consult. Bridge Engr., Pine Bluff, Ark..Apr. 5
Advertised, Eng. News, Apr. 5.
Apr. 10.Str. Steel Draftsman, New York, N. Y..Mar. 22
Apr. 12.Dynamo Engineman, New York, N. Y..Mar. 29
Advertised, Eng. News, Mar. 29 and Apr. 5.
Apr. 14.Arch. Draftsman, Albany, N. Y........Mar. 29
Apr. 14.Engineering Examiner, Albany, N. Y...Mar. 29
Apr. 14.Boiler Inspector, Albany, N. Y........Mar. 29
Apr. 14.Rodman, Albany, N. Y.................Mar. 29
Apr. 14.Gas & Elec. Inspector, Albany, N. Y....Mar. 29
Apr. 18.Engineer, Carpenter, Winnebago, Neb..Mar. 29
Apr. 18.Assayer, Chicago, Ill...................Mar. 22
Apr. 18.Scientific Asst., Washington, D. C.......Mar. 1
Apr. 18.Arch. Draftsman, New York, N. Y......Mar. 15
Apr. 24.Topograph Dftsman, New York, N. Y...Mar. 29
Advertised, Eng. News, Mar. 29 and Apr. 5.
Apr. 25.Arch. Draftsman, New York, N. Y......Mar. 15
Apr. 25.Mint Apprentice, Washington, D. C......Apr. 5
May 2.Engr. Draftsman, Wheeling, W. Va....Apr. 5
May 2.Elec. Assistant, Washington, D. C......Apr. 5
May 3.Asst. Elec. Engr., California...........Apr. 5
No date.Master Electricians, Ft. Totten, N. Y....Mar. 15
Advertised, Eng. News, Mar. 15 and 22.

PROPOSED WORK

ENGINEERING NEWS desires to obtain the **earliest possible reliable information** concerning all projected work. We will appreciate any items that you may send us. Copies containing such information will be mailed to you, upon request.

Address, **WAINWRIGHT RANDALL**
Editor Construction News

RAILWAYS.

The names of parties awarded contracts are printed in capital letters.

ALBERTA & FLATHEAD.—Arthur C. Kemmis, Solicitor, of Pincher Creek, Alta., made application to the Parliament of Canada for an act of incorporation for power to construct and operate a railway from a point on the Crows Nest Branch of the Canadian Pacific Ry., at or near Pincher Station, to the Waterton Lakes, thence to the eastern boundary of British Columbia, to the Flathead River, and up this river to its source; also for power to construct branches not to exceed 40 miles in length, and with all the powers usually granted to railway companies.

BATON ROUGE, HAMMOND & EASTERN.—C. H. Fisk, Ch. Engr., Hammond, La., states that this road will extend from Baton Rouge, La., to Merrill, Miss., 167 miles, 100 miles of the line being located in Louisiana and 67 miles in Mississippi. The route is via Covington, La., and Nicholson and Perkinston, Miss. Surveys have been made to Nicholson, 100 miles, and the line is under survey from that point to Merrill. Grading has been commenced from Baton Rouge to Hammond. Contracts for 50 miles of the line are to be let immediately. Sol. Wexler is Pres., New Orleans, La. Noted on Feb. 22.

BESSEMER & LAKE ERIE.—The annual report of Mr. E. H. Utley, General Manager, states that with a traffic of 10,000,000 tons the limit of economical operation of a single-track road has about been reached. Of 218 miles of main track, 56 miles are double track, and about 20 miles are to be double tracked this year. Within the next two years the doubling of the balance of the line should be taken care of.

BOUNDARY, KAMLOOPS & CARIBOO CENTRAL.—This company has applied to the Parliament of Canada for power to amend its acts of incorporation to enable it to construct its railway from a point near Grand Forks, B. C., thence in a northerly direction following the valley of the north fork of the Kettle River and by the most feasible route to Franklin Camp and Fire Valley, thence to Grand Prairie.

CALGARY & EDMONTON.—H. C. Oswald, Secy. of this company, has applied to the Parliament of Canada for an act authorizing the construction of its Lacombe branch from its present terminus 110 miles east of Lacombe, Alberta, to a point in Range 27 or 28, west third meridian, between Township 35 and 42.

CHICAGO GREAT WESTERN.—The New York "Sun," on March 28th, stated that "provision has been made for double tracking the Chicago Great Western road from Chicago to Oelwein, Iowa. The work will cost, it is estimated, $3,500,000. Of this amount $300,000 already has been appropriated by the directors. Work will not be begun this year, but will be pushed in 1907. It will be of great economic advantage in the operation of the road and will add greatly to its safety. The road will purchase immediately 1,000 new freight cars, of which it is in great need." A. Munster, St. Paul, Minn., is Ch. Engr.

DARIEN & WESTERN.—A press report from Darien, Ga., states that the Darien & Western R. R. has applied for permission to change its name to the Georgia Coast & Piedmont Railroad. H. D. Emerson is Vice-Pres. and Gen. Mgr., at Darien.

GULF, PLAINVILLE & NORTHERN.—Incorporated in Kansas to build a railroad from Plainville, north through Rooks and Phillips Counties, to the Nebraska state line, 60 miles; from Plainville south to Hoisington, about 60 miles, and from Plainville east to Barnard, about 65 miles. Capital stock, $1,000,000. Incorporators: F. E. Reynolds, S. M. Jeffrey, J. V. Burroughs, C. W. Brown, A. M. King, M. C. Merritt, J. N. Sayer, P. Peterson, M. Bissett, N. M. Bailey, J. E. Colby, C. A. Elliott, W. B. Green, C. G. Cochran, F. B. Gardiner, C. H. Goodman, N. F. Shaw and F. C. Cochran, of Plainlille, and P. J. Deane, of Hays, Kan.

GULF, COLORADO & SANTA FE.—We are officially advised that the company's forces are enlarging the Fort Worth, Tex., yards, amounting to about two miles of new track. C. F. W. Felt is Ch. Engr., at Galveston.

We are officially informed that KAHMANN & McMURRAY, Bryant Bldg., Kansas City, Mo., have contract for building the extension from Davis to Sulphur, Ind. T. Line has been located and right-of-way obtained. The new line will be 9½ miles long.

GULF & NORTHWESTERN.—We are officially advised that the field work of the survey of this line of railway has just been completed, from Waco, Tex., the future head of navigation of the Brazos River, via Bosqueville, Erath, China Springs, Cayote, Womac, Odle's Ranch, crossing the G. C. & S. F. R. R., between Meridian and Morgan, and the Texas Central near Walnut Springs, thence up the East Bosque valley via McCurdy & Daniel's ranch, Mathern gap, Johnsville, Bunker Hill and Stephenville, where the Ft. W. & R. G. R. R. is crossed, thence up the South Bosque valley, through Cage's ranch, Berlin, Twin Mountains, through the Thurber coal fields to Strawn, intersecting the Texas & Pacific R. R. The length of the line is 122 miles. The first 75 miles will have a maximum grade of 0.8 of 1% and the remainder will have a 1% maximum grade, compensated for curvature. Blue print showing route is on file at office of Engineering News, New York. The engineers are now at work developing their notes, preparing maps, profiles, estimates, specfications, etc., preparatory to construction. Quotations are desired on all railway construction materials, equipment, steel, bridge and structural materials, water stations, etc. McCarthy, Starnes & Co., Consulting Engineers, Lufkin, Tex., are the Engrs.-in-Charge. P. A. McCarthy is Ch. Engr., at Lufkin.

HANOVER RAILWAY.—Incorporated in Illinois to build a railway from a connection with the C., B. & Q., at Hanover, to a connection with the Chicago Great Western, at North Hanover. Capital stock, $50,000. Incorporators: Benjamin Eadie, William Speer, George Jeffers, John Eadie and A. B. White, all of Hanover, Ill.

INDIAN TERRITORY.—The Missouri Construction Co. has been organized and incorporated at Oklahoma City, Okla., to build a railroad from Davis to Turner Falls, Ind. T., about six miles. The incorporators are John Maney, R. E. Brownell, A. T. Shead and Guy V. McClure, all of Oklahoma City.

IONIA & OWOSSO.—E. M. Hopkins, Pres., Detroit, Mich., states that this line has been surveyed from Ionia to Owosso, Mich., and that construction will begin this summer. THE INTERNATIONAL CONSTRUCTION CO., of New York, N. Y., of which A. H. Radford, Saranac, Mich., is Gen. Mgr., has the contract for the construction. H. P. Lloyd, New York, is Vice-Pres.; Treas., John L. Rich, Detroit, Mich.; Secy., Frank Westcott, Detroit, Mich. Robert E. Kline, Dayton, O., is Ch. Engr.

KNOXVILLE, SEVIERVILLE & NEWPORT.—G. W. Pearsall, Ch. Engr., Knoxville, Tenn., advises us that contracts are to be let at an early date for building this line from Knoxville to Newport, via Sevierville. Preliminary surveys are completed and 20 miles located. Right-of-way is 50% secured. Capital is ready. Jerome Templeton, Knoxville, is Pres.

KOOTENAY CENTRAL.—The contract for building the first 10 miles of this road, which is to be built by the Canadian Pacific from Golden to Fort Steele, B. C., and thence to Wardner, has been awarded to the GENERAL CONTRACT CO., of Vancouver, B. C.

KANAWHA & WEST VIRGINIA.—Bids are asked until noon, April 25, for grading, tunneling, bridging and track-laying on a 12-mile extension of this railroad. N. C. Van Natta, Ch. Engr., Charleston, W. Va. (Advertised, Engineering News.

LAKE ERIE TERMINAL & SOUTHERN.—We are officially informed that no further steps may be taken toward constructing this line from the sewer pipe factory owned by H. B. Camp, at Independence, to Cleveland. Seven miles are graded and rails are now being laid. H. B. Camp is Pres. and R. J. Wood is Ch. Engr, Central Trust Bldg., Akron.

LEHIGH VALLEY.—JOHN F. DOLAN, of Elizabeth, N. J., has just been awarded contract for grading and masonry on new change of line at Towanda, Pa., involving an expenditure of $300,000. Construction work will begin at once.

MARSH FORK RY.—This company has been incorporated in West Virginia to build a railroad from Surveyor, W. Va., to the mouth of the Kanawha River. H. Fernstrom, Norfolk, W. Va., is Ch. Engr. Surveys are in progress.

MID-OREGON R. R.—We are officially advised that bids will be received soon by this company for building its line from Portland, Ore., through the Willamette Valley and Central Oregon to Ontario. Capital, $500,000. Wallis Nash, Portland, is Pres.

MISSOURI PACIFIC.—It is reported that this company plans an extension from Iuka west to Dodge City, Kan., about 70 miles long. E. F. Mitchell, Engr. of Construction, advises us that his department has not been notified that construction of this line is contemplated.

NEW YORK, CHICAGO & ST. LOUIS.—Improvements are contemplated which will cost approximately $2,000,000, according to A. W. Johnston, Gen. Supt., Cleveland, O. Double-tracking, the erection of repair shops and the elimination of grade crossings are included in the programme of betterment. Superintendent Johnston is also reported as stating that eventually the road will be double-tracked from Cleveland to Buffalo, N. Y.

OREGON R. R. & NAVIGATION CO.—It is reported that ten miles have been graded on the branch from Elgin to Joseph, Ore., 63 miles. GEORGE McCABE, of Portland, Ore., has the contract for the first 16 miles, from Elgin to the mouth of the Grand Ronde River. Contract for the remaining 47 miles, from the river to Joseph, has been awarded to ERICSON & PETTERSON, of San Francisco, Cal. Grading is in progress on the first seven miles of the new line from Saint Johns to Troutdale, Ore., 20 miles, and contracts for the 13 miles from Woodlawn to Troutdale will be let as soon as the right-of-way has been acquired. The PACIFIC COAST CONSTRUCTION CO., of Portland, Ore., has the contract for the first seven miles, from Saint Johns to Woodlawn. G. W. Boschke, Portland, Ore., is Ch. Engr.

PENNSYLVANIA R. R.—The New York "World" on April 4th stated that the NEW YORK CONTRACTING CO., 215 West 33d St., New York, has contract for excavating two solid blocks of granite and for building retaining walls at the western approach to the proposed Pennsylvania R. R. station at 33d St. and Seventh Ave., New York. The two blocks to be excavated are those bounded by 31st, 32d and 33d Sts., Ninth and Tenth Aves. Est. value, $4,500,000.

PITTSBURG, BINGHAMPTON & EASTERN.—George E. Moffat, Ch. Engr., Canton, Pa., advises us that surveys are partly completed for the line from Binghampton, N. Y., to a point east of Pittsburg. Capital for construction is secured. Some contracts remain to be let. F. A. Sawyer, at Binghampton, N. Y., is Pres.

SOUTHERN RY.—The "Wall Street Journal," of New York City, states that the "Southern Railway is making a survey of the mountainous country contiguous to its Nashville division, between Monterey and Harriman, Tenn., with a view to building a number of short lines into the coal fields of that district. The engineering staff has just completed a preliminary survey for a 20-mile branch to extend from Crossville to a point on the Big Laurel River, passing through a section where the coal rights are owned by persons who have long desired railroad facilities, in order that they might develop their holdings. Several other propositions for spurs and branches in that part of the state are being investigated by the railroad officials."

ST. LOUIS, EL RENO & WESTERN.—Extensions are proposed, it is said, from Guthrie, Okla., northeast to Peru Junction, Kan., to connect with the Missouri Pacific, about 125 miles, and from El Reno southwest to Altus, Okla., about 100 miles. H. A. Genung, Guthrie, Okla., is Ch. Engr.

SALINA & NORTHWESTERN.—Surveys are being made for this railway from Salina northwest via Lincoln to Osborne, Kan., about 70 miles. The directors are: George H. Whitcomb, J. W. Going, F. M. Bonebrake, Clad Hamilton and J. W. O'Neil, all of Topeka, Kan. George H. Whitcomb is Pres., Salina, Kan.

SLOANS VALLEY RY.—We are officially informed that this company has been incorporated in Kentucky to build a railway from Sloans Valley, Ky., on the Cincinnati, New Orleans & Texas Pacific Ry., eastward along the Cumberland River to mouth of the Laurel River, 25 miles. Surveys are completed and right-of-way secured. G. B. Nicholson, Cincinnati, is Ch. Engr.

TEXAS RY.—This company has been chartered to build a railroad from Port O'Connor, on Matagorda Bay, in Calhoun County, Tex., north via Victoria, Yoakum, Gonzales and Seguin to New Braunfels, in Comal County, a distance of 170 miles; with a branch line from Seguin to San Antonio, 40 miles; and a branch line from Yoakum to La Grange, 50 miles, a total of 260 miles. The authorized capital stock of the company is $1,000,000. The principal office is to be at San Antonio, Tex. It is stated that construction work will be begun at once. The company owns an old grade from Victoria to Port O'Connor, 40 miles, upon which track will be laid. Liberal donations of land and money have been offered by all of the important towns through which the line is projected. Among the incorporators are Wm. Aubrey, F. H. Bushich and W. C. Rigsby, of San Antonio; Samuel Granat, of New York; T. F. Howard and B. N. Peck, of Gonzales; H. Roos, of Yoakum; J. K. Hexter, of Victoria; and Harry Landa, of New Braunfels.

WISCONSIN CENTRAL.—Bids are asked until noon, April 15, for grading work at White River on the Wisconsin Central Ry., about six miles south of Ashland. Plan, profile and specifications covering this work, which involves approximately 400,000 cu. yds. of earthwork and the necessary clearing and grubbing, can be obtained by application to C. N. Kalk, Ch. Engr., Milwaukee, Wis. (Advertised, Engineering News.) Plans and specifications are on file at office of Engineering News, New York.

ELECTRIC RAILWAYS.

The names of parties awarded contracts are printed in capital letters.

AUGUSTA, ME.—The Gardiner, Richmond & Topsham Street Ry. has been incorporated to build an electric line from Gardiner, through Richmond and Bowdoinham to Topsham, where it will meet the Lewiston, Brunswick & Bath road. The distance is 32 miles. Capital stock, $180,000. The promoters are Fred T. Bradstreet, Freeman Patten, Charles S. Whitney, Harry B. Lawrence and Fred S. Thorne, all of Gardiner; L. C. Ballard, of Farmingdale; and Noble Maxwell, of Richmond.

NORWICH, CONN.—We are officially advised that the stockholders of the Norwich & Westerly Ry. Co. have voted $750,000 bond issue. The NATIONAL CONSTRUCTION & EQUIPMENT CO., 42 Broadway, New York City, has the general contract. The line is to run from Norwich to Preston, North Stonington and Westerly, R. I. All surveys are completed, and construction is in progress. Rails are laid between Norwich and Poquetanuck, Conn., six miles. Ten more miles of rail are to be laid. Power-house will be located midway on route between terminals. Thos. Hamilton is Pres., at New London, Conn.; Thos. Allen is Ch. Engr., at Norwich.

ELMIRA, N. Y.—The contract for repairs to the Elmira & Seneca Lake Ry. Co.'s line has been awarded to the McGREEVY CONSTRUCTION CO., Ithaca. Cost, $40,000.

SYRACUSE, N. Y.—The Syracuse Rapid Transit Ry. Co. has decided to build an extension of the Butternut line, to cost about $75,000.

Work will be begun soon on signal stations for the electrification of the West Shore R. R., between this city and Utica, under the supervision of F. B. Wiegand, Supervisor of Signals, Utica. Noted fully last week.

OSSINING, N. Y.—Charles H. Werner, Secy. of the Hudson River & Eastern Traction Co., 32 Liberty St., New York, advises us that surveys are made for the proposed line from Ossining to Pleasantville and Sherman Park, N. Y., about nine miles. L. B. Grant is Pres., at 32 Liberty St. Company is not ready to announce when contracts will be let.

NEW YORK, N. Y.—The corporation known as the Long Island Consolidated Electrical Companies, all of the stock of which is owned by the Long Island R. R., and the bonds of which are guaranteed by the latter, now includes six trolley companies, the construction cost of which aggregates $779,235. In addition to this, the company has acquired half of the stocks and bonds of the New York & Long Island Traction Co. and the Long Island Electric Ra Co., sharing the ownership equally wi Belmont interests. The cost of these rties was $1,360,507. It is proposed to new lines this year to cost, with exte [illegible]. This makes a total of $2,640, t will be needed at once, which, when from the new authorized bond issue 0,000,000, will leave $7,360,000 for fu tensions. The lines now in existence be constructed at once will earn $ a year, it is estimated.

OCEAN CITY, N. J.—Art of incorporation have been filed in T for the construction of a trolley ro ross the Great Egg Harbor Bay from City to Somers Point, to connect wi Atlantic City trolleys. The length of oad spanning the bay is about two Capital stock, $25,000. The names o directors are John A. MacPeak, F. R. ll, James F. Cotter, of Philadelphia; an A. DuVal, J. H. Switzer, Charles Ricem d G. H. B. Martin, of Camden, N. J.

COATESVILLE, PA.—The adelphia, Coatesville & Lancaster Passe Ry. Co., which now has in operation me time six miles of railway, will co the remainder of the road next su making about 12½ miles in all, running Coatesville, Pa., to Lancaster, Pa., a nnecting the intervening towns of Pom Parkesburg, Lenover, Atglen, Christi and Gap. It is a very thickly settled regi e manufacturing interest being larg ticularly at Coatesville and Parkesburg re there are iron works. The Roberts bbott Co., Schofield Bldg., Cleveland, O., recently been retained in a consulting city for the property. The railway is financed by W. J. Hayes & Sons, of Cle d.

HARRISBURG, PA.—We are ally advised that the Central Pennsylv Traction Co., of this city, will build ext ns within city limits. Company's force ll do the construction work. George Ro is Ch. Engr.

SALISBURY, MD.—C. S. Jenn representing a syndicate of Baltimore apitalists, has secured the charter of the Somerset Street Ry. Co., as well as the charter for a line from Salisbury to Meyersdale, Md. The proposed line will connect at Windber with the line of the Johnstown Passenger Ry. and will be carried south through Somerset to Cumberland. The line will cost $1,000,000. The Salisbury and Meyersdale section will be built first. Construction will start as soon as the weather will allow. The charter for the line from Rockwood to Meyersdale has been secured and work will begin first at Meyersdale. Construction will then be continued north to Windber from Rockwood and south from Meyersdale to Cumberland, where it will connect with the Cumberland electric system, which now runs to Westernport through Frostburg and Lonaconing. The line from Cumberland to Johnstown will be completed in two years.

BALTIMORE, MD.—The Baltimore Terminal Co. has applied for a franchise to build its proposed double-track line, several miles long, in Baltimore to provide entrance for the Washington, Baltimore & Annapolis Electric Ry. George T. Bishop is Pres., and J. G. Masterton, Secy., at 801 Maryland Trust Bldg. For details of the Washington, Baltimore & Annapolis Electric Ry. see issue of March 29th.

HAMPTON, VA.—We are officially informed that bids for construction work will be taken soon by the Hampton & Yorktown Ry. Co. The company proposes to build a 20-mile line from Hampton to Yorktown. F. W. Darling is Pres. and E. Chambers is Ch. Engr., at Hampton. Surveys are made.

HIGH POINT, N. C.—E. J. Justice has been granted a franchise by the Board of County Commissioners for the construction of an electric railway from High Point to Greensboro. He has agreed to begin a survey soon.

YAZOO CITY, MISS.—The Board of Aldermen has directed the mayor to appoint a committee of three aldermen and citizens to secure plans and specifications and to learn the cost of building a street railway. It is proposed to issue bonds to build the road provided the cost will not be over $50,000. Power probably will be furnished by the Yazoo City light, water and sewerage municipal plant.

CAPE GIRARDEAU, MISS.—M. E. Leming, of this city, is seeking a franchise for an electric street railway. Mr. Leming agrees to have his system, with a trackage of over six miles, in operation within six months after the franchise is granted.

NEW ORLEANS, LA.—O. W. Crawford, 809 Hennen Bldg., New Orleans, is interested in the proposed electric railway from New Orleans to Baton Rouge, with a line to St. Tammany parish, for which investigations were recently made by John A. Shafer, Civil Engr., of Indianapolis, Ind.

CLEVELAND, O.—The village of Newburg has granted franchises to the Cleveland Electric Railway Co. for lines on Kinsman St., South Woodland Ave., North Woodland Ave., Union St. and Rice Ave. The grants are for 20 years.

EAST LIVERPOOL, O.—We are informed by A. R. Pallows, Res. Engr., East Liverpool Traction Co., that bids will be received about May 1st for reconstruction work on line from Toronto, Ohio, to Wellsville and from East Liverpool to Vanport, Pa. Surveys are completed. Right-of-way is generally secured except for some final adjustments to avoid railroad grade crossings. Capital is ready. Wheeling, W. Va., is now connected with Steubenville, O., and Steubenville with Toronto, Ohio, by trolley. The new line will connect Toronto with Wellsville, which is now connected with East Liverpool, and will connect the latter place with Vanport and Beaver, Pa. Theodore N. Ely, Buffalo, N. Y., is Pres. Westinghouse, Church, Kerr & Co., 10 Bridge St., New York City, are the Engrs.

SPRINGFIELD, O.—We are officially advised that the Washington Traction Co., which now operates 13 miles of line, will construct about 25 miles additional and bids for this work will be received this month. Surveys are being completed; right-of-way is secured. Capital is obtained. E. W. Christy, Cleveland, O., [illegible] Pres. This line formerly was the Springfield, Charleston, Washington & Chillicothe Ry. The line will extend from Springfield to Washington Court-House, O.

YPSILANTI, MICH.—We are officially advised that the Detroit, Ypsilanti, Ann Arbor & Jackson Ry. Co.'s recent $600,000 bond issue calls for [illegible]-mile spur to Dexter, Mich. J. P. Clark is Gen. Mgr. and Pur. Agt.

FLINT, MICH.—The Detroit, Flint River & Saginaw Valley Railway Co. has been granted a franchise in Flint. Company will construct an electric railway from Saginaw to Fenton via Flint. The road will be built by two companies; the Fenton, Long Lake & Flint line and the Saginaw-Flint line. W. F. Davidson, of Port Huron, is the Pres. of both. D. D. Aitken, Vice-Pres.; E. D. Black, Secy., and Arthur Bishop, Treas.

BLOOMINGDALE, ILL.—The Elgin & Dupage Electric Railroad Co., capital $10,000, has been incorporated to construct an electric railway from River Forest, Cook county, Ill., through the counties of Cook, Dupage and Kane to Elgin, Kane county, Ill. The incorporators and first board of directors follow: Frederick W. Kobusch, Charles Hallenbech, Charles F. Strauschild, Edwin W. Fischer and John H. Roehler, all of Bloomingdale, Ill.

FOREST LAKE, MINN.—The Twin City Rapid Transit may build a 15-mile extension from White Bear to Forest Lake. D. W. Dozier is Ch. Engr., at Minneapolis.

SEDALIA, MO.—We are officially advised that a movement has been started to build an electric railway from Sedalia to connect with Bunceton, Prairie Home, California and Jefferson City. Frederick L. Schebb is Secy. of Prairie Home Improvement Association, which has been organized in that place to further the project.

LITTLE ROCK, ARK.—The Spring River, Ashflat & Franklin Electric Railway, Light & Power Co. has been incorporated with capital of $100,000, with $2,600 paid up, to construct an electric railway from some point along Spring River through Ashflat to Franklin. The road will connect with the Frisco Railroad at some point along Spring River and will traverse Sharp County to Ashflat, then turning southward will pass into Izard County, running to Franklin. The incorporators are: S. L. Guthrie, T. W. Simpson, W. O. Wadley, J. W. Bryant, R. L. Hastings, L. D. Phillis, W. E. Brawley, I. G. Ritchie, R. E. Sample, J. H. Franklin, S. P. Turner, W. Clayton, C. D. Ritchie, E. C. Hotchkiss and J. N. Roberts.

LAWTON, OKLA.—We are officially advised that 80% of right-of-way is secured by the Lawton, Denton & Dallas Electric R. R. Co. for its projected line from Lawton to Dallas, Tex., 150 miles. Contracts probably will be let in a few months' time. Capital stock is $250,000. Route is located, subject to change by chief engineer. J. W. Lowrey is Pres. and S. E. McCully is Secy., both at Sanger, Tex. D. Fitzgerald, 80 Wall St., New York, is interested.

PESCADERO, CAL.—The Pescadero Railway & Improvement Co. has been incorporated, with a capitalization of $600,000, to build a branch to the Ocean Shore Railway at Pescadero. The shareholders are: L. H. Sage, Geo. Sieungh, R. J. Graham, W. L. Dean, J. H. Goldman, L. R. Nottrohm and J. B. Rogers.

GALT, ONT.—James Ryerson, American Consular Agent, at Galt, informs us that it is proposed to build an electric railway line from Galt to Hamilton, Ont., 26 miles long. The work is not yet under contract. It probably will be built during the coming summer.

TORONTO, ONT.—The Toronto St. Railway Co. has under consideration an issue of $1,000,000 of stock to provide for the construction of 50 miles of track and for new cars. R. J. Fleming is Gen. Mgr.

W. C. Chisholm, City Solicitor, of Toronto, has made application to the Ontario Legislature for an act to enable the city to construct electric railway lines upon independent routes within the limits of the city for the use of radial electric railways, and to empower the city to make agreements with any electric railway company for the use of the said lines.

The Toronto & Hamilton Ry. Co. has given notice that application will be made to Parliament for an act changing the name of the company to the Toronto, Niagara & Western Railway Co., authorizing the company to extend its line from some point on the main line to the international boundary near the city of Windsor, increasing the capital stock of the company and authorizing the company to enter into arrangements with power companies for the transmission of electric power over its right-of-way for the purpose of electrifying the road.

LIGHT AND POWER PLANTS.

The names of parties awarded contracts are printed in capital letters.

BELLOWS FALLS, VT.—The Fall Mountain Electric Light & Power Co. is reported to have purchased a mill site at Gageville, and will probably construct a dam and power station there. Wm. A. Russell, of Boston, is Pres.

NORTH ATTLEBORO, MASS.—The citizens are reported to have voted $35,000 for enlarging the municipal electric light plant.

LAKE PLACID, N. Y.—The State Gas Commission has granted this village permission to construct and operate an electric light plant.

TROY, N. Y.—Bids for lighting the streets and public buildings with electricity and gas have been rejected, being considered too high. The Corporation Counsel was instructed to draw up a bill to be introduced in State Legislature providing for a municipal lighting plant.

NEW YORK, N. Y.—Bids were received on March 31 by Bureau of Yards and Docks, Navy Dept., Washington, D. C., for machinery for power plant at New York navy yard, as follows: Thomas & Smith, 17-19 South Carpenter St., Chicago, Ill., (Item 1) $132,907, (Item 2) $135,002, (Item 3) $131,105, (Item 4) $133,207, (Item 5) $8,000, deduct (A); $7,300, deduct (B); $1,100, deduct (c); $5,500, deduct (D); $5,000, deduct (E). The Scofield Co., Pennsylvania Bldg., Philadelphia, (Item 1) $158,957, (Item 2) $161,308, (Item 3) $158,593, (Item 4) $160,941. Blake & Williams, 211 West 20th St., New York, (Item 1) $145,000, (Item 2) $147,500, (Item 3) $143,000, (Item 4) $145,500, (Item 5) $141,000, deduct (F); $138,400, deduct (G); $142,000, deduct (H). A. D. Granger Co., 95 Liberty St., New York, (Item 1) $128,740, (Item (5) $800, deduct conditionally (I); $1,100, deduct conditionally (K); $500, deduct conditionally (L). Evans, Almiral & Co., 281-83 Water St., New York, (Item 1) $127,295, (Item 2) $129,307, (Item 3) $126,073, (Item 4) $128,126, (Item 5) $121,250, deduct (M); $120,000, deduct (N); $116,295, deduct (O); $115,000, deduct (P). M. W. Kellogg Co., 143 Liberty St., New York, (Item 1) $137,425, (Item 2) $139,707, (Item 3) $135,643, (Item 4) $137,920, (Item 5) $125,852, deduct (Q); $124,828, deduct (R). E. Rutzler Co., 129 White St., New York, (Item 1) $133,355, (Item 2) $135,330, (Item 3) $131,733, (Item 4) $133,806, (Item 5) $119,361, deduct (S); $118,041, deduct (T); $5,000, add (U). Modifications under Item No. 5: (A) If Edgemore boiler is used deduct from Items 1 and 3. (B) If Edgmore boiler is used deduct from Items 2 and 4. (C) Stirling boiler deduct from Items 2 and 4. (D) Heine boiler deduct from Item 2. (E) Heine boiler deduct from Item 4. (F) Heine boilers, Foster superheaters and Roney stokers. (G) Heine boiler, Foster superheaters and Ross stokers. (H) B. & W. boiler, B. & W. superheaters and Ross stokers. (I) If Wilkinson stoker is used. (K) If Murphy stoker is used. (L) If McNaull superheater is used. (M) Stirling boiler and superheater No. 2803 and Roney stoker. (N) Stirling boiler No. 2803 and Murphy stoker. (O) Stirling boiler and superheater No. 2802 and Roney stokers. (P) Stirling boiler No. 2802 and Murphy stokers. (Q) Franklin boiler, Foster superheater and Roney stoker. (R) Franklin boiler, Foster superheater and Roney stoker. (S) Heine boiler, Roney stoker, Foster superheater, Wheeler condensers. (T) Heine boilers, Murphy stokers, Foster superheaters and Wheeler condensers. (U) If Worthington condensers are used, add to either item.

PLAINFIELD, N. J.—It is reported that the Board of Governors of the Muhlenburg Hospital contemplate the installation of an electric light plant.

HOLLIDAYSBURG, PA.—It is reported that a number of local capitalists have perfected arrangements for the erection of the first hydro-electric long-distance supply company in Pennsylvania. An organization has been effected in the name of the Bedford Water Power and Electric Co. The power houses will be located at the headwaters of Yellow Creek, in Loys Gap, Bedford County, the cost of the plant being estimated at $150,000. By a concrete conduit the power will be conveyed to the electric plant, just 30 miles from Altoona, and will furnish 1,000 HP. daily.

COLONIAL BEACH, VA.—It is reported that a plant for street and general lighting will be installed here. Capt. E. S. Randall, Washington, D. C., is interested.

PULASKI, VA.—It is reported that this town has engaged an engineer to prepare plans for the erection of a water-power electric plant for lighting and operating a pumping station.

NORFOLK, VA.—Press reports state that H. H. Mandley, of New York, and others, will erect a $1,000,000 power plant on Mahone's Lake Canal, near this city.

ALEXANDRIA, VA.—The council has passed an ordinance providing for an advertisement for bids for the lease of the electric light franchise for a period of not more than thirty years. Bids were received last fall on this proposition, and a bill was passed by the common council granting the franchise to W. T. Barstow, of New York, but the measure was defeated by the board of aldermen.

CREWE, W. VA.—A gas plant will be established here by the city. Address the Mayor.

FAYETTE, W. VA.—Fayetteville-Fayette Railway will erect an electric power house, two stories, 75 × 45 ft., at a cost of $4,000; D. S. Roberts, Fayetteville, W. Va., Manager.

NEWELL, W. VA.—It is reported that the North American Manufacturing Co. will build a power plant at Newell for the purpose of operating the street railways and the Homer Laughlin Pottery.

MARION, N. C.—Bids are asked at once by J. L. Morgan, Director of the Marion Light & Power Co., for work incident to the development of water-power on the Catawba River. Estimated cost, $10,000. W. W. Latspeich, of Marion, is Engr.

HICKORY, N. C.—The Water-Power Electric Co. has been incorporated with $250,000 capital stock for the development of water-power on the Catawba River near Hickory. It proposes to build a dam 600 ft. long, obtaining about 6,000 HP., which will be transmitted to Hickory, a distance of three miles, furnishing electric lights and power. M. E. Thornton is President.

KINGSTREE, S. C.—It is reported that the town has voted $15,000 for the construction of a light plant. Dr. S. C. Scott is Comr. Pub. Wks.

ACKWORTH, GA.—See under Water-Works.

MARIANNA, FLA.—It is reported that this city will issue bonds for $25,000 to cover cost of constructing an electric light plant and school building. Address J. H. Carter.

ALBERTVILLE, ALA.—Bids for the construction of a water power plant for the Fall City Hotel, Power & Mineral Water Co. will be received about July 1. Estimated cost is $35,000. E. B. Kay, of Tuscaloosa, is Engr.

ENSLEY, ALA.—It is reported that the Birmingham Railway, Light & Power Co. has decided to build a substation here. J. A. Emery, Birmingham, is Gen. Mgr.

NEW IBERIA, LA.—The Bayou Teche Traction & Power Co., capital $1,500,000, has been incorporated. F. A. Augur, Pres.; J. T. White, Secy.

NEW ORLEANS, LA.—Bids were received on March 31 by Bureau of Yards and Docks, Navy Dept., Washington, D. C., for power-house and chimney at New Orleans naval station, as follows: Alphons Custodis Chimney Construction Co., 95 Nassau St., New York, (item 9), $8,162, deduct conditionally, $372; H. R. Heinicke, Inc., 160 Fifth Ave., New York (item 10), $5,675; Weber Steel-Concrete Chimney Co., 204 Dearborn St., Chicago, Ill. (item 10), $5,800; Penn Bridge Co., 312 Bond Bldg., Washington, D. C., (item 1) $44,840, (item 2) $4,600, (item 3) $60, (item 4) $1,900, (item 11) $8,200, (item 13) $500, (item 14) same; can furnish in seven instead of nine months; Niles-Bement-Pond Co., 111 Broadway, New York, $3,500 (a), $1,075 (b): (a) for crane only; (b) for runways for crane erected in place.

DOVER, TENN.—A. M. Teppit, it is said, will establish an electric plant here.

EAST LIVERPOOL, O.—Thomas Bracken, Engr., of New York, is here to establish an electric power plant at the West Point coal fields.

GARRETT, IND.—The Wayne General Construction Co., of Fort Wayne, has been granted a franchise to operate a gas plant here.

PERU, IND.—Jerome Herff, Joseph Andrews and others, of Peru, it is stated, will build a 4,000-HP. power plant at Shoals during the summer.

LANSING, MICH.—C. B. Kelsey, of Grand Rapids, Mich., has bought the Lansing gas plant and will improve it at a cost of $100,000.

MONROE, MICH.—Improvements to cost $50,000 are planned for the power plant at this city. Wm. R. Goellner is Ch. Engr.

SHEPHERD, MICH.—C. C. Field, of Shepherd, is reported to have decided to construct dams, power houses, etc., on Chippewa River and will furnish light and power in Isabella, Gratiot, Midland and Clare Counties.

ROCKFORD, ILL.—The Rockford Gas Light & Coke Co. is planning to double the capacity of its plant.

CARLINVILLE, ILL.—The Council has granted a franchise to Senator W. L. Mounts for a lighting plant.

QUINCY, ILL.—The Quincy Gas & Electric Co. is considering the erection of extensive additions to its plant. Geo. M. Massen is Ch. Engr.

ABINGDON, ILL.—The Abingdon Electric Co. has been granted the franchise to operate a gas plant here. Construction is to begin at once. Strawthen Givens is Pres.

BEDFORD, IA.—The People's Light Co., of Davenport, have awarded a contract for the erection of a mammoth gas holder here, the work to be commenced at once. The holder will have a capacity of 135,000 cu. ft. A. W. Vanderveer is Pres.

ELLENDALE, MINN.—It is reported that $12,000 has been subscribed for the construction of an electric light plant here.

FOREST CITY, MINN.—A. H. De Long, it is reported, will build water-power electric plants on the Crow Wing River, near Forest City, and also at Litchfield.

ELDORADO, KAN.—THE ELDORADO LIGHT, HEAT, ICE & POWER CO. has been granted a franchise to build a gas and electric light plant in this city and has been awarded a contract for lighting the streets. A power plant will be built at once.

NEWTON, KAN.—It is reported that the Pintsch Gas Co. will build a new plant here.

GOODLAND, KAN.—The Goodland Light, Heat & Power Co. has been incorporated with a capital stock of $50,000, and has been granted a franchise for a lighting plant here.

GARDEN CITY, KAN.—Bids are asked until 2 p. m., May 28, for furnishing and installing complete, ready for operation, an electric power plant of 450-KW. switchboard output, for pumping purposes, including boilers, engines, generators, switchboards, etc., using for prime movers either steam turbines or reciprocating steam engines, or gas engines. O. H. Ensign, Elec. Engr., Merchants Trust Bldg., Los Angeles, Cal. Thomas Ryan, Acting Secy., Dept. Interior, Washington, D. C. (Advertised, Engineering News.)

GRAND ISLAND, NEB.—Bids are asked until April 23 by the City Clerk for construction of an electric light and water-works plant. W. K. Palmer, Consult. Engr., 718 Dwight Bldg., Kansas City, Mo., will also receive bids.

OMAHA, NEB.—Bids are asked until April 14 by Maj. M. G. Zalinski, Q. M., U. S. A., for extending lighting system and installing fixtures at Fort Omaha.

RED CLOUD, NEB.—It is reported that bids will be received about May 15 for the construction of an electric light plant. John Martz, Seward, Neb., is Construction Engr.

ELLENDALE, N. DAK.—Plans for the erection of an electric light plant for the Ellendale Light & Power Co., at an estimated cost of $12,000, are ready. Claussen, Burke & Pillsbury, of St. Paul, Minn., are Engrs.

MISSOULA, MONT.—Dr. Joseph Oettinger is preparing for the establishment of the new gas plant here for which he has received a franchise.

VERSAILLES, MO.—A bond issue of $5,000 has been authorized for the purpose of completing the electric light plant.

SEDALIA, MO.—The Sedalia Gas & Fuel Co. is reported to have awarded a contract for a new gas plant, to cost $40,000.

EUREKA SPRINGS, ARK.—A franchise for the construction of an electric light plant has been granted to G. U. Matthews and C. M. Barnes.

GEORGETOWN, TEX.—The Georgetown Water, Light & Power Co., capital $100,000, has been incorporated for the purpose of building light and water-works systems here.

YORKTOWN, TEX.—An electric light and power plant is to be installed here shortly by Koenig & Son, at a cost of $16,000.

SHAWNEE, OKLA.—The Shawnee Coal & Gas Co. will build an addition to their gas plant at an estimated cost of $80,000.

MUSKOGEE, I. T.—The city has granted to a company composed of W. L. Reeves, A. W. Robb, W. N. Patterson, George W. Barnes, J. Lee Dabbs and others, a franchise for the erection of an electric lighting plant.

ODESSA, WASH.—It is reported that F. J. Holman and J. W. Smead, both of Spokane, have petitioned the Council for a franchise to build an electric light plant.

OREGON CITY, ORE.—The Portland General Electric Co. has adopted plans for the erection of power plant at Oregon City, which will involve an expenditure of $2,000,000. Plant will be opposite present plant, known as Station B. Wooden portion of the old dam will be replaced with concrete. This change will cost $100,000. H. W. Goode, of Portland, is Pres. and Gen. Mgr.

RIVERSIDE, CAL.—It is planned to install an additional steam plant of 400 HP. at the city power-house. F. A. Worthey is Mgr. and Ch. Engr.

The Riverside Trust Co., the Riverside Water Co., the Riverside Land & Irrigation Co., and the Chase Nursery Co., are reported interested in the construction of an electric plant to supply power to the Santa Ana Valley. It will cost about $250,000.

STOCKTON, CAL.—Arrangements are being made by the American River Electric Co. to construct a large steam power plant in this city at an estimated cost of $250,000. M. Fleishhacker, 520 Market St., San Francisco, Cal., is Pres.

PLACERVILLE, CAL.—The American River Electric Co. will build a new reservoir at its plant here. Estimated cost is $100,000. Paul Robinson, Placerville, is Supt.

UPLAND, CAL.—The PACIFIC COAST MANUFACTURING CO. has been awarded a contract for the construction of a 150-HP. electric plant for the Ontario Power Co., at $23,924.

SAN BERNARDINO, CAL.—F. E. MONTEVERDE, representing the Desert Power Co. has made application for a franchise for a steam power plant with oil as fuel.

PALO ALTO, CAL.—Bids are asked until April 19 for improvements at the light, power and water-works plants. J. J. Lewin is Supt.

MANHATTAN, NEV.—It is reported that the Nevada Power & Light Co. will build a power plant at Manhattan in the near future.

SANDY, UTAH.—The Utah Light & Railway Co., of Salt Lake City, and J. Butler, of Murray, are both applying for franchises for an electric light system in Sandy.

HUNTINGTON, UTAH.—The Electric Light & Milling Co. has been granted a franchise and will at once build an electric light plant here. Wm. Howard is Pres.

MORRISBURG, ONT.—The Council is reported to have awarded to Wm. Birmingham, of Ottawa, the contract for constructing a 1,100-HP. electric plant on St. Lawrence River Canal, around Duplatte Rapids, at $73,600.

BRIDGES.

The names of parties awarded contracts are printed in capital letters.

GLOUCESTER, MASS.—It is stated that an additional appropriation of $17,000 will be asked to enable the Essex County Commissioners to construct a Scherzer rolling lift bridge over the Gloucester Canal. This will make the total appropriation $72,000.

WOONSOCKET, R. I.—Council has appropriated $11,000 for a steel bridge over the New York, New Haven & Hartford R. R. on Arnold St. Frank H. Mills is City Engr.

NEW YORK, N. Y.—Bids are asked by Louis F. Haffen, Pres. Borough of Bronx, until 11 a. m., April 12, for widening of bridge over the New York, New Haven & Hartford Railroad Co.'s tracks at 161st St.

READING, PA.—Bids are asked by H. F. Livingood, County Controller, until 10 a. m., April 20, for constructing a concrete arch bridge over Morlattin Creek near Douglasville. (Advertised, Engineering News.)

MEMPHIS, TENN.—Bids are asked by F. M. Guthrie, Secy., until noon, April 21, for the construction of permanent repairs to the steel bridge across 'Hatchie River.

TOLEDO, O.—Frank I. Consaul, Ch. Engr., Bd. Public Service, advises us that city council passed preliminary legislation to build a new bridge across the Maumee River at a special meeting held on March 30. Bridge is to be built at present Cherry St. site. Mr. Consaul recently submitted a report showing the following estimated cost of the proposed bridge, if constructed according to any of the four plans mentioned: Jackson to Main, $822,550, Y-plan, $1,071,550; Cherry to Main (82.5 ft. wide), $665,000; Cherry to Main (63 ft. wide), $839,414.

FORT WAYNE, IND.—Bids are asked until 10 o'clock a. m., April 18, for the construction of superstructures of concrete and iron, steel bridges and concrete arches. J. L. Smith is County Audr.

COLUMBUS, O.—Bids were received March 30 for the construction of Reed Ave. viaduct as follows: For plan "A" substructure and retaining walls: Cooke, Grant & Fritz Brothers, Columbus, $44,273; Wm. E. Schwartz, Shepard, O., $47,100; Muskingum River Stone Co., Malta, O., $49,243; F. M. Townsend, Zanesville, O., $50,117; J. A. Swingle & Co., Zanesville, O., $51,071; C. A. & A. W. Schneider, Columbus, O., $54,578; Jones Bros., Columbus, O., $57,199; Westwater & Casey, Columbus, O., $61,705; L. E. Sturm, Columbus, O., $65,981. Bids for superstructure were as follows: Wynkoop & McGoomley, Toledo, O., $58,290; McClintock-Marshall Construction Co., Pittsburg, Pa., $53,500; Huston & Cleveland, Columbus, O., $57,200; Mt. Vernon Bridge Co., Mt. Vernon, O., $58,134; E. J. Landor, Canton, O., $58,500; Cowing Engineering Co., Cleveland, O., $59,226; Illinois Bridge Co., Chicago, Ill., $60,487; Oregonia Bridge Co., Oregonia, O., $62,775. Bids for roadway, sidewalk and column encasing construction on superstructurle were as follows: George Geigele, Columbus, O., $16,600; Schillinger Brothers Co., Chicago, Ill., $10,848; Acme Paving Co., Columbus, O., $14,883; Buckeye Engineering & Constructing Co., Columbus, O., $13,476. Bids for the approaches were as follows: M. J. Burns, Columbus, O., $14,229; Westwater & Casey, Columbus, O., $15,539; R. A. Swickard, New Albany, O., $15,616; J. M. Snouffer, Worthington, O., $16,520; Buckeye Engineering & Construction Co., Columbus, O., $16,667; George Geigele, Columbus, O., $16,779; Wm. E. Schwartz, Shepard, O., $17,052; A. G. Pugh, Columbus, O., $19,582; Jones Brothers, Columbus, O., $19,652.

MICHIGAN CITY, IND.—It is reported that the construction of a rolling lift bridge across the harbor at Franklin St. is now under consideration. H. M. Miles is City Engr.

WABASH, IND.—The County Commissioners have accepted plans for the erection of twelve new bridges in the county.

MISHAWAKA, IND.—Plans have been completed for two bridges each costing about $80,000. Each bridge will have three 84-ft. spans. Wm. Mare, Mishawaka, is Engr. M. B. Russ is Comr. Bids will be advertised soon.

MACKINAW, ILL.—The contract to construct this new 162-ft. bridge across the Mackinaw River, near this city, was awarded to J. W. BUTLER, of Deer Creek, Ill., representing the Illinois Bridge & Iron Co. The contract for the 189-ft. approach was awarded to WALTER PORTER, of Mackinaw.

SIOUX CITY, IA.—The following bids were received for the construction of the new steel bridge across Perry Creek at Third St.: Midland Bridge Co., Kansas City, Mo., $7,500; Canton Bridge Co., Canton, O., $7,695; Twin City Bridge Co., Minneapolis, Minn., $7,600; A. Y. Bayne & Co., Minneapolis, Minn., $6,600; Iowa Bridge Co., Des Moines, Ia., $6,640; J. W. Towle, Omaha, Neb., $8,000; A. E. Shorthill Co., Marshalltown, Ia., $6,300.

MINNEAPOLIS, MINN.—Bids are asked until noon, April 16, by H. R. Scott, County Audr. for constructing bridge No. 264 in Hennepin County.

BIGTIMBER, MONT.—Bids are asked by H. C. Allen, County Clk., until noon, April 12, for building two bridges across Sweet Grass River here.

HUDSON, S. D.—It is reported that a new bridge is to be built across the Sioux River here. G. P. Schiager, Hudson, is County Comr.

ST. LOUIS, MO.—The contract for constructing the concrete bridge across the River Des Peres was awarded to the MEYERS CONSTRUCTION CO., of St. Louis, for $6,320.

PINE BLUFF, ARK.—Jefferson County, Ark., is about to construct a combination railroad and highway bridge across the Arkansas River at Pine Bluff, Ark., and is in need of a competent and experienced consulting engineer for the work of making soundings, locating bridge, drawing plans and specifications if deemed feasible; superintending construction, etc. References required. Applicants will correspond at once with E. J. Kerwin, Chn. Bd. Comrs. (Advertised, Engineering News.)

FRESNO, CAL.—We are advised that plans are in progress for a 400-ft. reinforced concrete bridge across the San Joaquin River here. Cost will be about $30,000. Scott McKay is Engr.

SAN FRANCISCO, CAL.—It is stated that the Ocean Shore Railroad Co. will construct a viaduct on Channel St., at a cost of $80,000. John B. Rogers, San Francisco, is Ch. Engr.

ST. ANTHONY, IDAHO.—Bids are asked by Victor Hegsted, Clk., until April 9, for the construction of a pile bridge.

BUILDINGS.

The names of parties awarded contracts are printed in capital letters.

SACO, ME.—The Saco and Biddeford Savings Institution, of Saco, Me., will erect an office building at Main and Thornton Sts., this city. Estimated cost, $100,000.

PLYMOUTH, MASS.—Bids are asked for the construction of an armory for the town of Plymouth, to cost about $50,000. Gay & Procter, Archs., 21 Bromfield St., Boston.

SYRACUSE, N. Y.—The general contract for erection of two fireproof dormitory buildings for Syracuse University, costing about $150,000, has been awarded to the CONSOLIDATED ENGINEERING & CONSTRUCTION CO., 140 Nassau St., New York. Revels & Hollenbeck, Syracuse University, are Archs.

By signing the bill for the appropriation of $115,000 for the New York State Fair, the expenditure of $51,000 for a steel grandstand here is reported to be assured. G. L. Heins, State Arch., has prepared the plans and will advertise for bids at once.

NEW YORK, N. Y.—Plans have been filed by Buchman & Fox, Archs., 11 East 59th St., for a 6-story brick loft, 100 × 87 ft., on 17th St., 80 ft. east of Sixth Ave., for J. H. De Stuerr. Cost, $70,000.

By W. C. Frohme, Arch., 24 East 23d St., for a 12-story brick loft, 64 × 82 ft., at 14-20 West 19th St., for P. Braender, 24 East 23d St. Cost, $310,000.

By C. M. Straub, Arch., 122 Bowery, for six 6-story brick flats and stores, 50 × 88 ft., on 108th st., west of First Ave., for R. Kurzok, 431 Broadway. Cost, $300,000.

By C. M. Straub, Arch., 122 Bowery, for three 6-story brick flats and stores, 47 × 88 ft., on 111th St., east of Madison Ave., for Rothstein & Wolf, 38 Broome St. Cost, $135,000.

By Maynicke & Franke, Archs., 298 Fifth Ave., for a 16-story office and store structure, 79 × 95 ft., at 341-347 Fifth Ave., for the heirs of Laura C. Delano. The Union Trust Company is trustee for the owners. The building will be of brick, granite, limestone and terra cotta, and the cost is placed at $400,000.

By L. A. Goldstone, Arch., 110 West 34th St., for a 5-sty brick garage, 50 × 95 ft., at 137-139 West 89th St., for W. C. Strange, Jr., 112 Riverside Drive. Cost, $50,000.

By Neville & Bagge, Archs., 217 West 125th St., for a 6-sty brick flat, 75 × 87 ft., on 143d St., 100 ft. west of Hamilton Place, for the John V. Signell Co., 302 Central Park West. Cost, $130,000.

By Bannister & Schell, Archs., 69 Wall St., for a brick church and parish house, 73 × 130 ft., at Convent Ave. and 149th St., for the Collegiate Dutch Church of 113 Fulton St. Cost, $120,000.

By C. A. Rich, Arch., 320 Fifth Ave., for a 4-story brick garage, 112 × 101 ft., at Broadway and 70th St., for the Winton Motor Carriage Co., 1706 Broadway. Cost, $90,000.

NEW YORK, N. Y.—The following architects have agreed to participate in the competition for plans for the New Theater, to be erected on Central Park West, between 62d and 63d Sts.: Barney & Chapman, Carrere & Hastings, Delano & Aldrich, J. H. Freedlander, Hoppin, Koen & Huntington, George B. Post & Sons, Robertson & Potter, Trowbridge & Livingston, and Warren & Wetmore. No other architects will be allowed to compete, except in the event of the retirement of one of the original competitors, who are to be paid $750 each for their plans in case they are not accepted. This jury has been named by the Building Committee to prepare a programme of the competition, see to its management, and make the award; Charles T. Barney, Otto H. Kahn, H. R. Winthrop, Heinrich Conried, Stanford White, Donn Barber, and Edgar V. Seeler. The successful architect will be compensated on the basis of 6 per cent. on the total cost of the theater. The drawings are to be delivered not later than April 21, and the jury will endeavor to report its decision to the Building Committee by May 1. The theater is intended to conform to the Continental type of theater, in which provision is made for a foyer, grand staircases, ample retiring and cloak rooms, smoking rooms, entrances, elevators and stores.

We are officially advised that P. W. Rouss, 549 Broadway, will erect a 15-story fireproof store and loft building, 50 × 100 ft., at 125 Mercer St. Materials used will be brick, iron and stone. Estimated cost, $200,000. W. J. Dilthey, 1 Union Sq., is Arch.

GREENWICH, N. Y.—Bids are asked until 11 o'clock a. m., April 14, by Van Ness & Curry for the carpentry, masonry, painting, electric wiring and plumbing of new school building at Greenwich, N. Y. N. S. Langdon, Clerk Bd. of Education.

ROCHESTER, N. Y.—Plans have been completed for additions to the Genesee Valley Club, on East Ave. and Gibbs St., Rochester. Cost, $85,000. Claude Bragdon, 104 Cutler Bldg., Rochester, is Arch.

COOPERSTOWN, N. Y.—Charles C. Ingalls, Binghamton, N. Y., submitted the lowest bid for the new school building here, and will probably receive the contract. Cost, about $80,000.

CALIFORNIA, PA.—Bids are being received for the construction of a boys' dormitory and dining hall for the California State Normal School. Cost, $60,000. J. P. Bailey, Times Bldg., Pittsburg, Pa., is Arch.

WAYNESBURG, PA.—Plans have been completed for a 4-story brick and stone bank building, 30 × 150 ft., for the People's Bank of Waynesburg. Cost, $75,000. Robinson & Winkler, House Bldg., Pittsburg, Pa., are Archs.

PHILADELPHIA, PA.—JOHN R. WIGGINS & CO. have been awarded the contract by John T. Windrim, Arch., 1107 Walnut St., to erect the Bell Telephone Co.'s $100,000 fireproof office building and exchange at 1705 and 1707 South Broad St., to be known as "Dickinson Exchange." The proposed structure will have a frontage of 60 ft. and a depth of 120 ft. The exterior walls will be constructed of brick and terra cotta. The building will be three stories high, with a basement.

Ballinger & Perrot, Archs. and Engrs., 1200 Chestnut St., have completed plans and specifications and invited estimates, due April 6, for a new parochial school building and sisters' house, for St. Stanislaus' Roman Catholic Church, to be erected at Third and Fitzwater Sts. It will be 77 × 54 ft., three stories and basement, and will provide accommodations for about 500 boys and girls. The walls will be of brick with a base course of rubbed Hummelstown brownstone and have terra cotta trimmings.

PITTSBURG, PA.—A. & S. WILSON CO. have been awarded the contract for erecting a 20-story office building at Fourth Ave. and Wood St. for the Union National Bank. The structure will have a frontage of 97 ft. and a depth of 85 ft. Estimated cost, $850,000. F. J. Osterling, 701 Times Building, Pittsburg, is Arch.

BALTIMORE, MD.—MORROW BROS., contractors and builders, 212 Clay St., have been awarded contract to erect the addition to the Madison Exchange of the Chesapeake & Potomac Telephone Co., Madison Ave., near Robert St. The addition is to be three stories high. Joseph Evans Sperry, 409 Calvert Bldg., is Arch.

WASHINGTON, D. C.—The Union Trust Co., 1414 F St. N. W., has purchased lot at 15th and H Sts., and will erect an 8-story fireproof bank and office building, to cost about $300,000 on the site, which is 53.8 × 161 ft.

We are informed that plans are in progress for an 8-story brick, stone and steel fireproof office building for W. H. Hibbs & Co., 1419 F St. N. W., at 725 15th St. N. W., Washington.

WASHINGTON, D. C.—Bids are asked until noon, May 1, for furnishing and installing one electric elevator, for lighting fixtures, terrazzo floors, brick and stone slab flooring, for Army War College Building. Capt. John Stephen Sewell, Engrs. (Advertised, Engineering News.)

PALATKA, FLA.—The new court-house to be erected by Putnam county will cost about $60,000. It will be 62 × 95 ft., fireproof construction, steam heat and electric lights. W. Chamberlain & Co., Birmingham, Ala., are Archs.

MEMPHIS, TENN.—It is reported that J. N. Falls will erect an 8-story pressed-brick steel-frame office building, 50 × 148 ft., to cost $100,000.

CINCINNATI, O.—Plans are in progress for a 4-story apartment building, 60 × 143 ft., for Thomas Paxton, Third and Walnut Sts. Pressed brick and stone, open nickel plumbing, asphalt roof, hard plaster, combination light fixtures, marble tile and iron grille work, art glass, twelve hardwood mantels, etc. $75,000. Edward Schlochtermeyer, Luin and Hopkins Sts., is Arch.

CLEVELAND, O.—Two Catholic congregations here will erect new school houses costing $75,000 and $100,000, respectively, plans for which have been prepared by W. W. Hodges, Arch., 757 Rose Bldg.

CINCINNATI, O.—MICHAEL HEINTZ, of this city, has been awarded the contract for the new Avondale School, to cost $178,320.

BOWLING GREEN, O.—Bids are asked until noon, April 25 for the erection of a brick veneered church building for the Christian Church of Bowling Green. J. W. Knight, Secy. Bldg. Com.; Charles Henry & Son, Akron, O., tre Archs.

MADISON, IND.—It is stated that bids will probably be received about June 1 for the erection of a hospital, to cost about $500,000. Foltz & Parker, Union Trust Bldg., Indianapolis, are Archs. Dr. S. E. Smith, of Richmond, is interested.

MUNCIE, IND.—The plans of C. F. Drury have been accepted for construction of a new $50,000 building at Fifth Ave. on 13th St., Muncie, for the Swedish Olive Lodge.

ALPENA, MICH.—A new city hall is to be erected, to cost $100,000.

CHICAGO, ILL.—The Board Committee has approved the expenditure of $400,000 for the new James H. Bowen High School. Appropriations have been made for several other new schools here. John C. Fetzer, Chn. Bldgs. and Grounds Com., Bd. of Education.

EVANSTON, ILL.—The Franciscan Brothers, St. Louis, Mo., in charge of the St. Francis Hospital, have prepared plans for a hospital to be built on Ridge Ave., Evanston, for the St. Francis Hospital. It will be five stories, with a frontage of 216 ft., of fireproof construction, have pressed brick and stone exterior, slate roof, marble and tile work, steam heat, electric light, and cost $100,000. The old building on the premises will be used as an auxiliary.

CHICAGO, ILL.—Henry L. Newhouse, Arch., 4630 Prairie Ave., is preparing plans for an apartment building to be built at 5026 Grand Boulevard for himself. It will be 3-story, 35 × 115 ft., of stone and pressed brick. It will contain only three apartments, and cost $50,000.

Howard Shaw, Arch., 175 Dearborn St., has completed the plans for the Mentor Bldg., to contain stores, offices and shops, to be built at the corner of State and Monroe Sts., for Eugene S. Pike, 604 First National Bank Bldg. It will be 16 stories, 46 × 83 ft., have fronts of polished granite, terra cotta, vitrified brick, iron and plate glass. Cost, $400,000.

OSHKOSH, WIS.—Plans for a new Y. M. C. A. building have been received by G. F. Warner, Secy. The plans call for a building 60 × 110 ft., four stories; brick. The building will contain besides gymnasium, bath rooms and other accessories usual to such buildings, 34 rooms in two dormitories. Estimated cost is $65,000.

WAUKESHA, WIS.—Patton & Miller, Archs., Hartford Bldg., 140 Dearborn St., have taken figures on the Walter L. Rankin Science Hall, to be built on the campus of the Carroll College. It will be 3 stories and basement, 52 × 132 ft., and cost $50,000.

SIOUX CITY, IOWA.—J. J. KEEFE, 306 Pierce, has been awarded the contract for the $90,000, 3-story brick and terra cotta business building, to be erected at Fourth and Jackson Sts. for the Massachusetts Realty Co. Henry Fisher, 418 United Bank Bldg., is Arch.

DULUTH, MINN.—MAC LEOD & SMITH, of this city, have been awarded the contract for a 7-story addition, 75 × 125 ft., to the wholesale building of F. A. Patrick & Co., Duluth. Cost, $65,000. W. A. Hunt, Lonsdale Bldg., Duluth, is Arch.

RED WING, MINN.—Bids are asked until April 10 for the construction of a depot and division office building for the C. G. W. Ry. Co., at Red Wing, Minn. G. H. Herrold is Division Engr.

LAWRENCE, KAN.—The contract for the construction of the new gymnasium of the University of Kansas has been awarded to WM. NADELHOFFER, of this city. Cost, $71,000.

DULUTH, MINN.—EMIL ZAUFT has been awarded contract for erecting a school in West Duluth, at $35,619, and THEO. NAUFFTS, of Duluth, has b awarded contract for school on Sixth Duluth, at $41,000.

WICHITA, KAN.—Joseph radi, Arch., 810 Olive St., St. Louis, M has prepared the plans for the new cath to be built here. The building is to 167 × 75 ft. From the floor to the top e dome will be 91 ft. The two steeple ll be 125 ft. high. The entire front of building will be of polished gray granite and will cost about $100,000.

OMAHA, NEB.—The Co litan Hotel Co., it is stated, has been rporated by C. H. Dickens and others rect a hotel 8 stories high at 17th and glas Sts., at an estimated cost of $400,0

BATHGATE, N. DAK.— are asked until 1 p. m., April 19, for construction of the superstructure of a 2- high basement brick building, stone ned, for the North Dakota State Blind A m, at Bathgate. Joseph Bell De R of Grand Forks, N. Dak., is Arch. B. Robinson, Secy., Bathgate State Bank.

CHEYENNE, WYO.—Bids asked until 2 o'clock, mountain time, M 1, for constructing, plumbing, steam ating, and electric wiring, one barrac for Hospital Corps. Capt. W. S. Scott, str. Q. M. (Advertised, Engineering Ne

BUTTE, MONT.—Herman nna, Arch., is preparing plans for a y business block for the New York Re Co. It will be 117 × 209 ft., of reinforc concrete construction throughout, pres brick and terra cotta exterior. App imate cost, $300,000.

DALLAS, TEX.—The Colu a Club will erect a $50,000 building. Lang & Winchell, of Dallas, are Archs.

FORT WORTH, TEX.—JOHN BARDON has been awarded the contract to construct an addition to St. Joseph's Infirmary in this city at a cost of $76,000. Work on the addition will begin at once.

SEATTLE, WASH.—We are officially informed that W. D. Van Siclen, Arch., 756-757 New York Block, this city, is preparing plans for a 10-story store and office building, 102 × 108 ft., on Westlake Ave., for Stirrat & Goetz. The building, four stories of which are already completed, will be fireproof, and will be constructed of steel, concrete, granite, brick and terra cotta. Bids have been received for steel work only. No contracts have been let.

SEATTLE, WASH.—We are informed that bids will be asked soon by the Board of Public Works for constructing a new city jail and emergency hospital. Bonds to the extent of $175,000 have been voted.

PORTLAND, ORE.—We are officially advised that Whidden & Lewis, Archs., 47 Concord Bldg., this city, are preparing plans for a 4-story and basement brick warehouse of mill construction, 100 × 195 ft., for the Mitchell & Lewis Co., of Racine, Wis. Cost, $75,000.

PORTLAND, ORE.—ROBERT WAKEFIELD, of this city, has been awarded the contract for the erection of the new O. T. & N. depot at Spokane, Wash.

SAN FRANCISCO, CAL.—A modern 5-story building, 142 × 35 ft., to be used as a hotel, is to be erected on pile foundations at Clay, East and Merchant Sts., for the Mary C. Hastings trust. The structure will be of iron, steel, brick and terra cotta, with facing of light gray pressed brick. Cost, $85,000. Wm. H. Armitage, 211 Sansome St., is Arch.

RIVERSIDE, CAL.—We are officially advised that Arthur B. Benton, Arch., this city, is preparing plans for a 3-story brick Y. M. C. A. building, 85 × 175 ft., to cost $50,000. No contracts have been awarded.

LOS ANGELES, CAL.—CARL LEONARDT has been awarded the contract for the Central Building, a 10-story steel structure, at Seventh and Spring Sts. This is the main contract, and is for $229,150. It includes the excavating and general masonry work. The steel contract will be let separately. The cost of the building, including the installment of the plant for the Security Savings Bank, with its safe deposit department on the first floor, will be about $1,000,000.

SAN FRANCISCO, CAL.—The Sixteenth Amusement Co., it is stated, intends erecting a theater at Montgomery Ave. and Green St., to cost $50,000.

Wm. Curlett, Phelan Bldg., it is stated, has prepared plans for a 12-story store and office building to be erected at Grant Ave. and Post St., to be known as the Addison Head Bldg. Probable cost, $500,000.

SACRAMENTO, CAL.—The following are the lowest bidders for the repairs and alterations on the State Capitol: Excavating, filling, concrete, brick terra cotta, stone and granite work, John Hayes, Los Angeles, $94,946; iron work, Charles A. Palm, Sacramento, $47,787; alternative, if dome is omitted, deduct $1,650; carpentering, plastering, glazing and electric work, James Campbell, San Francisco, $126,900; plumbing and gas-fitting, Scott, Lyman & Stack, Sacramento, $23,850; steam heating and ventilating, Russell-Vail Engineering Co., Stockton, $17,500; galvanized iron, tinning, roofing, slating, fireproof and metal lathwork, Roebling Construction Co., San Francisco, $58,300; painting and graining, Len Hendricks, Santa Rosa, $11,149; elevators, Bryan Elevator Co., San Francisco, $12,655; stairways and ornamental grillwork, A. Merle Co., San Francisco, $37,480; marble work, Columbia Marble Co., San Francisco, $41,328; all work under head of scagliola, Waterhouse & Price, San Francisco, $31,444. The Columbia Marble Co. also submitted a bid of $84,875 for all marble tiling and scagliola work.

PRESCOTT, ARIZ.—Bids are asked until 3 p. m., May 4, for construction, plumbing, hot water heating and electric wiring of hospital at Whipple Barracks, Arizona. Capt. Chas. C. Walcutt, Jr., A. Q. M. (Advertised, Engineering News.)

PROPOSED WORK

ENGINEERING NEWS desires to obtain the earliest possible reliable information concerning all projected work. We will appreciate any items that you may send us. Copies containing such information will be mailed to you, upon request.

Address WAINWRIGHT RANDALL
Editor Construction News

WATER SUPPLY—IRRIGATION.

The names of parties awarded contracts are printed in capital letters.

NEWPORT, N. H.—It has been decided to extend the water system to the village of Guild and bids for the construction of about three miles of mains will be asked soon. J. B. Cooper is Chn. Water Comrs.

LAWRENCE, MASS.—Initial steps have been taken toward the extension of the water service. An expenditure of $50,000 is planned. A. D. Marble is City Engr.

BOSTON, MASS.—Bids were opened and contract awarded to the UNITED STATES CAST-IRON PIPE & FOUNDRY CO., of Philadelphia, Pa., for furnishing 4,000 tons of 40-in. pipe for the new water-works. The contract for furnishing 980,000 lbs. of small iron pipe was awarded to the FOXBORO IRON CO. No contract was awarded to either of the following bidders for furnishing 37,500 lbs. of composition pipe: O'Connor Bros., South Boston, Mass., $8,786; J. H. McCafferty, Boston, Mass., $9,275, and C. E. Rogers, Boston, Mass., $10,775.

MIDDLETOWN, CONN.—We are advised that property has been purchased for a reservoir here. No further details have been arranged.

WATERBURY, CONN.—An appropriation of $47,500 has been made to cover the cost of a high service pumping station here. It will have a capacity of 2,000,000 gallons a day. R. A. Cairns is City Engr.

NEW YORK, N. Y.—Bds are asked by Wm. B. Ellison, Comr. Water, Gas and Electricity, until April 14 for furnishing, delivering and laying water mains in several streets in the Boroughs of Manhattan and Bronx.

BROOKLYN, N. Y.—Bids are asked by Wm. B. Ellison, Comr. Water, Gas and Electricity, until April 11 for furnishing, delivering and erecting boiler plant, with its connections, at the Ridgewood pumping station.

NEW YORK, N. Y.—Bids are asked until 2 p. m., April 11, by William B. Ellison, Comr., Dept. Water Supply, Gas & Electricity, for furnishing and laying water mains in several streets.

ROSLYN (L. I.), N. Y.—It is stated that a movement is on foot to establish a system of water-works here to supply this place and Mineola.

NEW YORK, N. Y.—The ordinance granting an appropriation of $5,640,000 to improve the water system of this city has been approved by Mayor McClellan.

MASSAPEQUA, N. Y.—The Massapequa Water Co. has been chartered with $25,000 capital. S. H. Haite, H. A. Rounds, A. T. Haight and J. S. Lilly are Directors.

ROCHESTER, N. Y.—The Board of Directors of the Rochester & Lake Ontario Water Co. has appropriated $80,000 for the extension of the water mains.

UTICA, N. Y.—We are advised that the bids for completing the West Canada pipe line between Prospect and Hinckey, will not be opened until April 9. Bids were to have been opened on March 26.

JAMAICA (L. I.), N. Y.—It is reported that the Woodhaven Water Supply Co. will sink a number of wells at the Priggs farm, south of Ozone Park and erect a large pumping station.

VICTOR, N. Y.—A water supply system, including stand-pipes and pump-house, will be built here at an estimated cost of $12,000, according to reports.

ASBURY PARK, N. J.—It is said that a system of pipes and a pumping plant will be built here, at an estimated cost of $22,000. W. C. Burroughs is City Clk.

BAYONNE, N. J.—Bids are asked until 8 p. m., April 17, by the City Council for constructing a cast-iron water pipe line on 22d Ave., Ave. J, etc. W. C. Hamilton is City Clk. (Advertised, Engineering News.)

BALTIMORE, MD.—The Water Board has decided to purchase the Keyworth property north of Druid Hill Park as a location for the new high-service reservoir, work on which will begin very soon.

The Park Heights Water Co. has applied to state legislature for incorporation with capital stock of $25,000 to operate waterworks at Park Heights, a suburb of Baltimore. Clarence M. Griffin, 111 North Charles St., is interested.

WASHINGTON, D. C.—We are officially advised that the District Commissioners have ordered the construction of the following water mains: 410 ft. of 4-in. water main in alley of Reservation "C"; 390 ft. of 8-in. water main in Fifth St., N. W., between Kennedy and Longfellow Sts., and 147 ft. of 8-in. main in Kennedy St., N. W., west from Fifth St.

EDINBURG, VA.—The town of Edinburg will vote April 26 on the issuance of bonds for constructing water-works. It is proposed to build a 1,000,000-gallon reservoir. About $15,000 will be invested. C. H. Fadeley is Mayor.

NEW MARTINSVILLE, W. VA.—This city is considering issuing $10,000 of bonds for erecting storage reservoir.

NORFOLK, VA.—It is reported that several engineering difficulties, including the crossing of a navigable stream, will attend the laying of the proposed main to the Jamestown Exposition site. An appropriation of $60,000 has been made to cover cost of the work. W. T. Brooke is City Engr.

MARSHALL, N. C.—The city of Marshall has voted bonds for the construction of proposed water-works. W. J. Weaver is Treas. Bd. Public Improvements.

GEORGETOWN, S. C.—We are officially informed that the Black River Water Co. will expend about $200,000 in constructing a water plant here. C. C. Wilson, Georgetown, is Ch. Engr.; A. H. Olmsted is Resident Engr.

ACKWORTH, GA.—Plans are nearing completion for a water-works system and electric light plant for this place. J. B. McCrary, Atlanta, Ga., is Engr. E. W. Lennon is Mayor.

HATTIESBURG, MISS.—Specifications are on file at the offices of Engineering News, Chicago, Ill.; Washington, D. C., and 220 Broadway, New York, for water-works extension, etc., as advertised in Engineering News. Bids are asked until April 10.

NEW ORLEANS, LA.—Bids are asked by F. S. Shields, Secy., until noon, May 15, for furnishing 100 miles of cast-iron water pipe and special castings from 4 to 24 ins. in diameter.

DONALDSONVILLE, LA.—Bids are asked by Chas. Maurin, Mayor, until 8 p. m., April 18, for the removal of stand-pipe and remodeling of the municipal power plant building.

BATON ROUGE, LA.—We are officially informed that the O'Neil Engineering Co., of Dallas, Tex., has plans in progress for a complete water-works system for this city. Water will be secured from artesian wells at about 2,000 ft. depth. The plant will have water tube boilers, compound duplex condensing pumps, air compressors, etc. The power-house will be of brick, the reservoir will be of concrete reinforced by steel, and about ten miles of large cast-iron pipe will be used for the mains. Plans will be completed about May 10.

BRISTOL, TENN.—It has been practically decided to build a reservoir at White Top, 29 miles from the city, at a cost of $500,000. Dr. J. F. Hicks is Chn. Water Com.

COLUMBIA, KY.—A company has been organized for furnishing a water-works system to this place. Paul Azeill is Pres.

BOWLING GREEN, KY.—Bids are asked by W. H. Philips, City Clk., until 2 p. m., April 26, for furnishing and installing complete with foundations and connections one 3,000,000-gallon pumping engine. (Advertised, Engineering News.)

CINCINNATI, O.—The following bids for laying 60-inch water mains on Eastern Ave. were received by the Water-Works Commissioners: From Western Pumping Station to Broad St., Kirchner Construction Co., $60,399; M. O. Herron, Pittsburg, $61,631; J. H. McQuade & Co., $65,534; Frank Burns, $66,040; Kinser Construction Co., Terre Haute, Ind., $70,287; Henkel & Sullivan, $76,309; J. J. Lynch & Co., Chicago, Ill., $69,745. From Broad to Martin Sts., A. M. Bowman & Co., Pittsburg, Pa., $27,483; Kirchner Construction Co., $56,400; M. O. Herron, $56,530; Kinser Construction Co., $58,937; Jas. J. Lynch & Co., $60,550; J. H. McQuade & Co., $62,933; Henkel & Sullivan, $71,075.

Bids are asked by Aug. Herrmann, Pres. Comrs. Water-Works, until noon, April 27, for erecting of flushing pumps for the settling reservoirs and the wash water pumps for the filter plant on the water-works grounds near California, O.

Bids were opened by the Commissioners of Water-Works for the furnishing of cast-iron pipe for the proposed water-works extension. The following bids were received: Massillon Iron & Steel Co., Massillon, O., $33.90 per ton for 3-in. pipe and $30.90 per ton for 4-in. pipe. J. B. Cloco & Co., of Chicago, Ill., $34 per ton for 3-in. pipe and $31 per ton for 4-in.

LIMA, O.—Bids are asked until noon, April 12 for brick addition to Lima Water-Works pumping station. Plans can be seen at the office of J. A. Chapin, Arch., Holland Bldg., Lima, O. L. L. Crumrine is Clerk.

SOUTH BEND, IND.—Press reports state that the Water Department has decided to increase the pumping facilities and make other improvements to the service. A. J. Hammond is City Engr.

HARMON, ILL.—A water-works system is planned for this town. Work will probably be let during the spring.

CARLINSVILLE, ILL.—The local water-works system is to be rebuilt at a cost of $25,000.

JOLIET, ILL.—The following bids were received for the proposed water-works improvements on several streets: Richmond St.: Monahan Bros., $911; Sandiford & Mitchell, $938; William Moran, $1,030. Miller Ave.: Monahan Bros., $610; William Moran, $646. Benton St.: Monahan Bros., $1,130; William Moran, $1,281; Sandiford & Mitchell, $1,286. Casseday Ave.: Monahan Bros., $1,338; Sandiford & Mitchell, $1,443; William Moran, $1,051.

CASEY, ILL.—It is stated that Jamieson & Stathers have secured the franchise for the water-works here.

JOLIET, ILL.—Bids are asked by M. Berscheidt, City Clk., until noon, April 9, for a 3,000,000-gallon cross compound Corliss crank and fly-wheel condensing pumping engine. H. A. Stevens is City Engr.

BELLE PLAINE, IA.—The following bids were received March 23 for constructing and installing water-works system at Belle Plaine: King Lambert Construction Co., Des Moines, Ia., $15,829; Cook Construction Co., Des Moines, Ia., $20,517; Western Steel Construction Co., Des Moines, Ia., $21,202; Des Moines Bridge & Iron Co., Des Moines, Ia., $21,651; A. M. Ozburn, Chicago, Ill, $20,904; W. D. Lovell, Minneapolis, Minn., $23,900; W. W. Berry, Centerville, Ia., $25,180; R. C. De La Hunt, Cedar Rapids, Ia., $21,229; Merriditb & Brandenburg, Cedar Rapids, Ia., $15,332; T. C. Brooks & Son, Jackson, Mich., $17,654. Contract for tower and tank was let to MERRIDITH & BRANDENBURG. The remainder of the work was let to T. C. BROOKS & SON. Iowa Engineering Co., Clinton, Ia., are Engrs.

WATERLOO, IA.—Bids are asked by J. E. Sedgwood, Secy., until 3.30 p. m., May 1, for sinking a deep well for the Waterloo Water Co.

AURORA, MINN.—The citizens are reported to have voted for water-works and sewers.

KANSAS CITY, KAN.—L. M. Miller and J. L. Browne have secured a 30-year franchise for water-works in this city and will probably build at once.

ARTESIAN, S. DAK.—The citizens of this city have voted to have a water-works system built immediately.

WYACONDA, MO.—It is reported that the Atchison, Topeka & Santa Fe Railroad Co. will build a large reservoir here at a cost of $18,000. W. B. Storey, Jr., Topeka, Kan., is Ch. Engr.

GALVESTON, TEX.—It is reported that the Southern Pacific Co. has accepted plans and begun the construction of a high-pressure fire-protection plant, independent of the city system, to cost about $150,000. Contracts for mechanical equipment needed are understood to have been awarded.

PERRY, OKLA.—The city of Perry will hold a special election on May 8 for the purpose of voting on the issuance of $30,000 of water-works bonds.

OKLAHOMA CITY, OKLA.—The contract for construction of a $20,000 water-works system at Marlow, Okla., was awarded to the O'NEIL ENGINEERING CO., of Dallas, Tex.

MARIETTA, IND. T.—The contract for the construction of a combined electric light and water-works system for Marietta was awarded to G. SAEGER, of Rich Hill, Mo., for $25,145. W. P. Bullock is Consult. Engr.

CHICKASHA, IND. T.—W. W. COOK & SON, Junction City, Kan., have contract at $45,442 for the construction of water-works and sewerage system here. Burns & McDonald, Kansas City, Mo., are Engrs.

PETALUMA, CAL.—The Petaluma Water & Power Co. has decided to issue $40,000 bonds for the purpose of erecting a reservoir.

OAKDALE, CAL.—Stanislaus Power & Water Co., of which T. C. Tuloch, of Oakdale, is Mgr., has purchased the property of the Oakdale Irrigation Co. and will enlarge the combined system, so as to serve water to orchardists and vineyards throughout the county. A dam will be built across Stanislaus River just below Knights Ferry for the purpose of taking water from river. The Stanislaus Co. has plans and specifications for a new main canal near Knights Ferry to be about 6 miles in length and cost about $600,000.

OCEAN PARK, CAL.—Estimates are being prepared for a concrete reservoir for the Ocean Park Water Co. It is being designed to hold 1,750,000 gallons, and will be located on a high knoll north of Sixth St., near Central Ave. It will be 130 ft. above sea level and will be 85 × 20 ft. and 16 ft. deep. The improvement is to cost approximately $25,000.

JEFFERSON, ORE.—The town of Jefferson has voted for issuance of bonds for a new water-works system. The source will be a spring about four miles distant at an elevation of 300 ft.

LEWISTON, IDAHO.—We are officially informed that the contract for the earth fill for dam at reservoir "A" was let to J. W. HOLMES and GEORGE W. McCABE at 18 cts. per cu. yd. for the team scraper work and 14 cts. per cu. yd. for the steam shovel work.

FORT WILLIAM, ONT.—H. S. Hancock, Jr., Cy. Engr., writes us that he is about to undertake the installation of a $400,000 water supply for this city. Information regarding such large plants, subaqueous pipe laying, sewers and sewage disposal is being gathered.

SEWERAGE.

The names of parties awarded contracts are printed in capital letters.

LIVERMORE FALLS, ME.—Town has voted, it is reported, to construct a sewerage system from plans of J. A. Jones, Engr., of Lewiston; these plans call for about four miles of sewers, to cost about $30,000.

BOSTON, MASS.—Bids are asked until noon, April 5, for the construction of sewers in two streets. John J. Leahy, Supt. Sewers.

MARBLEHEAD, MASS.—Snow & Barbour, Engrs., Tremont Bldg., Boston, are preparing maps of the town for a proposed sewerage system.

NEW YORK, N. Y.—Bids are asked until 3 p. m., April 11, by John F. Ahearn, Pres. Manhattan Boro., for construction of sewers in several streets and altering and improving sewers.

CAMDEN, N. J.—Council has awarded the contract for the construction of Line Ditch sewer to AARON WARD, at $85,000.

ARLINGTON, N. J.—William S. Logan, Town Surv., will prepare plans for the removal of all sewage now flowing into the Passaic River from this town.

ALTOONA, PA.—We are officially advised that bids will be asked shortly for the construction of the Fourth District storm sewer which will be 830 ft. long and cost $15,000. Harvey Linton is City Engr.

LANCASTER, PA.—F. H. Shaw, Engr., has stated in regard to the proposed sewer in Water St., that the city is awaiting decision of State Board of Health. The sewer is 9 × 9 ft. 6 in. horseshoe, of reinforced concrete, and 4,500 ft. in length; probable cost, $100,000.

WASHINGTON, D. C.—Robert S. Oliver, Asst. Secretary of War, has issued a revocable permit to the District Commissioners to build a section of the outfall sewage disposal system of the District in the bed of the Potomac River just below the city. This action was taken on the recommendation of the Chief of Engineers MacKenzie and Capt. Crosby, who have charge of the improvement of the river. The permit was issued subject to the condition that the work be done under the supervision and approval of an army engineer, and also if at any time it is desired to increase the depth of the channel at the locality, the Commissioners shall remove all projecting parts of the construction above the desired depth.

BELINGTON, W. VA.—It is reported that the citizens have voted to issue $30,000 of bonds for constructing a sewerage system and other municipal improvements. B. B. Rohrbough is Mayor.

MILLEDGEVILLE, GA.—Bids are asked by the Sewer Commissioners, according to reports, until April 12 for constructing a sewer system for which $20,000 is available. J. W. & W. F. Wilcox, Engrs., Macon.

JACKSONVILLE, FLA.—BRYAN & CO. are reported to have received the contract for constructing a sewer in Main St. Philip Prioleau is City Engr.

HUNTSVILLE, ALA.—Bids are asked until 7.30 p. m., May 1, by H. C. Pollard, City Clk., for the purchase of $10,000 of sewer bonds.

GREENVILLE, ALA.—Arthur Pew, Engr., Temple Court Bldg., Atlanta, Ga., is reported to be preparing plans for an extension of the sewerage system, which will require about four miles of 8 to 12-in. pipe.

HATTIESBURG, LA.—Specifications are on file at office of Engineering News, 220 Broadway, New York, for constructing sewer system. Bids to be opened April 10.

PADUCAH, KY.—It is reported that plans are being prepared for the construction of a sewer system in a new sewer district. L. A. Washington is City Engr.

RAVENNA, O.—E. W. Marvin, Village Clk., has stated that bids will be received about May 15 for the proposed sewerage system, to cost about $85,000. Williams, Proctor & Potts, Engrs., 17 Battery Place, New York.

CLEVELAND, O.—Bids are asked until noon, April 10, for the construction of sewers in several streets. W. J. Springborn, Pres.; A. R. Callow, Secy., Bd. Pub. Service.

COLUMBIANA, O.—Bids are asked until April 20, it is reported, for furnishing an engineer's sewerage plan or system of sewerage for the whole village. G. Ernest Koch is Clk. Vill. Council.

MARION, O.—Bids are asked until noon, April 11, for the construction of a storm sewer in Pennsylvania Ave. William Firs, Clk. Bd. Pub. Service.

ASHTABULA, O.—Bids are asked until noon, April 7, for the construction of a sewer in West Camp St. A. J. Richardson, Clk. Bd. Pub. Service. Noted on March 29.

ALLIANCE, O.—City will advertise about May 1 for bids for the construction of about 8,700 ft. of various-sized sewers with appurtenances.

NEWARK, O.—About 15,300 ft. of sewers will be constructed by this city during the summer and bids will be asked about June 1, according to reports. C. H. Wells is City Engr.

DAYTON, O.—Bids are asked by Wm. F. Miller, Clk., until noon, April 6, for constructing sanitary sewer in part of District No. 4, Alley North of Springfield St., from Third St. to the Alley East of Webb St.

FT. WAYNE, IND.—Bids are asked by the Board of Public Works, until 7.30 p. m., April 12, for the construction of sewer improvements.

ESCANABA, MICH.—The plans and specifications for three sanitary sewers in different parts of the city have been accepted by the council. The improvements are estimated to cost $10,000. D. A. Broutherton is City Engr.

MURPHYSBORO, ILL.—We are officially informed that the contract for constructing sewers in this city was awarded to H. H. JENKINS, of this place, for $19,900. Geo. Kennedy, Jr., Murphysboro, is Engr.

PANA, ILL.—At a recent meeting of the Board of Improvements it was decided to install a sanitary sewerage system in Pana, at a cost of about $30,000. The matter is referred to the council for approval.

DES MOINES, IA.—Plans have been completed for a brick ring trunk sewer to be constructed through Union Park and East Ninth St. J. W. Budd is City Engr.

Bids are asked by W. W. Wise, Chn. Com., until noon, April 16, for constructing about 3,150 ft. vitrified clay pipe sewer in Arlington Ave., Prospect Boulevard and Lincoln St.

GRUNDY, IA.—It is reported that the town of Grundy will have a new sewer system, costing about $15,000.

HIBBING, MINN.—The citizens are reported to have voted March 13 to construct a sewerage system, at a cost of $36,000.

SHAWNEE, OKLA.—Plans have been completed for the proposed sanitary sewer system for this place. The approximate cost will be $78,000.

SPOKANE, WASH.—Bids for constructing sewers in this city were received and contracts awarded as follows: Ninth Ave. and Hilliard St. to a point 8 ft. west of Chandler St., PETER COSTELLO, $1,340; JOHN FIFE, $2,200; JAMES BROAD, $2,265. Engineer's estimate, $2,411.

ASHLAND, ORE.—We are officially informed that the town of Ashland is contemplating the installation of a $3,500 sewerage system. G. S. Butler is Mayor.

SAN DIEGO, CAL.—Plans are in progress for the construction of a sewer on First and Second Sts., San Diego. The sewer will cost approximately $3,710. F. H. Dixon is Secy. Bd. Public Works.

LINCOLN, CAL.—At a recent election the city of Lincoln voted to install a $15,000 sewer system.

BAKERSFIELD, CAL.—A preliminary estimate of $123,342, the total cost of the proposed system of sewers for this city, has been filed by the city engineer. This estimate includes two pumping plants, each to consist of a pump and an electric motor and gasoline engine.

SAN FRANCISCO, CAL.—The contract for constructing the upper Sunset St. sewer was awarded to W. F. HANRAHAN, of this city, for $32,896.

FRESNO, CAL.—Bids are asked by W. H. Ryan, City Clk., until April 16, for construction of sewers. Bids were to have been opened March 19, but all bids were rejected.

VACAVILLE, CAL.—Bids are asked by E. E. McFarland, City Clk., until noon, June 26, for constructing sewerage system, to cost about $25,000.

FORT WILLIAM, ONT.—We are officially informed that this city is considering a sewerage system. H. S. Hancock, Jr., is City Engr.

STREETS AND ROADS.

The names of parties awarded contracts are printed in capital letters.

MANCHESTER, N. H.—The Common Council has made the following appropriations, the work of which will be under Wm. McElroy, Chn., Streets and Roads Comrs.: Repair of highways, $28,400; new highways, $5,000; paving (tar concrete), $3,000; macadamizing, $11,700; new sewers, $20,000; repairs of sewers, $5,000; paving gutters, $5,300; and paving (tar concrete or asphalt), $8,000.

CONCORD, N. H.—Bids are asked by A. W. Dean, State Engr., until 5 p. m., April 9, for the construction of about 1,500 ft. of macadam road in the town of Greenville.

MELROSE, MASS.—Bids are asked by W. Dabney Hunter, Engr. and Supt., until noon, April 16, for furnishing one 15-ton steam road roller. (Advertised, Engineering News.)

BRIDGEPORT, CONN.—William W. Starr, City Engr., advises us that contract for state highway section, 3,156 ft. long, on Connecticut Ave., was awarded to the city of Bridgeport at 90 cts. per lin. ft.; 16 ft. macadam, 7 inches deep.

ROCHESTER, N. Y.—Two contracts will soon be awarded for paving East Ave., between Main and Alexander Sts., and from Alexander St. to Culver Rd. The estimated cost of the improvement between Main and Alexander Sts. is $108,000., and for the other section, $65,000.

COBLESKILL, N. Y.—The INGALLS STONE CO. has been awarded the contract for laying a long stretch of Metropolitan brick block pavement, at $50,000.

CORNING, N. Y.—THE McGREEVY CONSTRUCTION CO., of Ithaca, N. Y., has been awarded the contract for paving the streets here.

NEW YORK, N. Y.—Bids are asked by John F. Ahearn, Pres. Manhattan Boro., until 3 p. m., April 11, for regulating, grading, curbing and flagging nine streets.

Bids are asked until 11 a. m., April 11, by Bird S. Coler, Pres. Brooklyn Boro., for regulating, grading, curbing and paving 27 streets with various materials.

Bids were opened March 27 for regulating, grading and repaving with asphalt block pavement on concrete and on sand, Sarah Ann St., Van Duzer St. and Richmond Rd. from Richmond Turnpike to Wright St., Borough of Richmond, as follows: Uvalde Asphalt Paving Co., 1 Broadway, $51,330; Hastings Paving Co., 25 Broad St., $46,542; Barber Asphalt Paving Co., 116 Liberty St., $45,562.

Bids were opened March 27 for repaving with asphalt block pavement Richmond Terrace, from York Ave. to S. S. H. Dock, Borough of Richmond, as follows: Hastings Pavement Co., 25 Broad St., $42,309; Barber Asphalt Paving Co., 116 Liberty St., $48,941; Uvalde Asphalt Paving Co., 1 Broadway, $50,449.

ROCHESTER, N. Y.—The contract for paving Park Ave. with asphalt is reported to have been awarded to ROCHESTER VULCANITE PAVING CO., of Rochester, for $46,005.

PENN YAN, N. Y.—It is reported that Jacob St. will be paved at an estimated cost of $15,000. Geo. H. Simmons is Village Clk.

WARSAW, N. Y.—The Commissioners of Wyoming County have adopted resolutions to construct or reconstruct 300 miles of roads. Surveys for the work will start at once.

BAYONNE, N. J.—Bids are asked until 8 p. m., April 17, for construction of 9,170 sq. yds. brick paving in 31st St. W. C. Hamilton, City Clk. F. W. Dalrymple, City Surv. (Advertised, Engineering News.)

NEW BRUNSWICK, N. J.—Council has passed an ordinance providing for the paving of Somerset St. from Easton Ave. to Harvey St. with brick or other suitable material. Fred C. Schneider is City Surv.

BAYONNE, N. J.—Bids are asked by City Council until April 17 for about 9,170 sq. yds. brick paving in 31st St., from Ave. A to Ave. F.

STROUDSBURG, PA.—Bids are asked by the State Highway Comrs., Harrisburg, until April 12, for constructing 29,800 ft. road in Tobyhanna Township. Jos. W. Hunter is Comr.

EAST PITTSBURG, PA.—Bids are asked until 7 p. m., April 6, for the construction of sewers on various streets. H. Snyder is Secy. Council.

BRADFORD, PA.—Bids are asked until 5 p. m., April 16, for paving 10,000 sq. yds. with brick. A. F. Bannon, Jr., City Engr. E. C. Charlton, City Clk. (Advertised, Engineering News.)

SCRANTON, PA.—The Warner-Quinlan Asphalt Paving Co., 32 Broadway, New York, N. Y., is reported to have submitted the only bid for paving with asphalt a portion of Linden St., the bid being $2.17 per sq. yd.

BALTIMORE, MD.—The Board of Awards has approved specifications for paving Erdman Ave. This is the first improvement to be made by the Commissioners of Opening Streets under the operation of the annex loan.

The Board of Awards has rejected the bids received last week for the paving of Park and Collington Aves. and Mosher St. with asphalt blocks. B. T. Kendall is City Engr.

BALTIMORE, MD.—The Board of Awards has prepared specifications for the paving of 25th St. Upon the recommendation of the Commissioners of Opening Streets, the bids will be called for on bitulithic, as well as on asphalt blocks and vitrified brick.

KEYSER, W. VA.—City is reported to ask for bids until April 20 for paving and grading, to cost $11,000. R. A. Welch is Mayor.

LYNCHBURG, VA.—Bids are asked until April 9 for certain concrete, granolithic and other works. H. L. Shaner is City Engr.

FRANKLIN, VA.—W. H. BARNES, of Suffolk, has been awarded contract for laying asphalt pavement on all the principal streets, at $1.20 per sq. yd.

PHOEBUS, VA.—Plans are being prepared by Girard Chambers, Engr. of Hampton, for about 26,000 sq. yds. of paving. Bids will be asked as soon as the plans are ready. L. P. Furness is Mayor.

SPARTANBURG, S. C.—City Council has awarded contract for street paving to the SOUTHERN BITULITHIC CO., of Nashville, Tenn., at $100,000.

WEST TAMPA, FLA.—Bids are asked by George N. Benjamin, Chn., until 4 p. m., April 25, for a sufficient quantity of vitrified paving brick to pave 30,000 sq. yds. of streets. (Advertised, Engineering News.)

HATTIESBURG, MISS.—Specifications are on file at offices of Engineering News in New York, Chicago and Washington, D. C., for paving 45,000 sq. yds. of streets. Bids are asked until April 10th, as advertised in Engineering News.

ASHLAND, KY.—Council is reported to have passed ordinances for paving several of streets here.

ASHLAND, KY.—Bids are asked until 7 p. m., April 9, for constructing brick pavements, concrete curb and gutter. J. A. Meridith, City Clk.

YOUNGSTOWN, O.—EVAN J. DAVIS has been awarded the contract for macadamizing the Youngstown and Jackson Rd. at $42,206. Other bids were: Andrew Colucci, $50,551; Patrick Joyce, $48,062; L. H. Young, $52,417; and G. A. Gialdini, $50,557.

DELAWARE, O.—Bids are asked by the Board of Public Service until noon, April 16, for paving about 6,000 sq. yds. F. D. King, Clk.

MARION, O.—Bids are asked by the Board of Public Service until noon, April 11, for grading, setting curbs and crossings, constructing drains and retaining walls, etc., of various streets. William Fies, Clk.

FINDLAY, O.—It is proposed to pave Center and Lincoln Sts. with brick, at a cost of $25,000. J. C. Edie, City Clk.

BARNESVILLE, O.—It is reported that FOWLER & WILSON have been awarded the contract for paving N. Chestnut St.

BLUFFTON, O.—It is now planned to pave Church St. in addition to Main St. The total cost will be about $100,000.

MANSFIELD, O.—Resolutions have been passed by the council providing for the improvement of several streets and alleys. Loren Keith is City Engr.

FINDLAY, O.—The council is reported to have authorized the paving of Center and E. Lincoln Sts. at an estimated cost of $27,350. J. W. S. Riegle is City Engr.

FT. WAYNE, IND.—The BARBER ASPHALT PAVING CO. has been awarded the contract for paving Wallace St., at $35,125. The Cleveland Trinidad Paving Co. bid $36,036. The street is to have a foundation of Portland cement concrete, 6 ins. thick, and is to be paved with sheet asphalt. The curbs are to be of berea, 5 × 22 ins. Length to be paved is 3,927 ft., and the width 30, 32 and 40 ft.

SOUTH BEND, IND.—Bids are asked until April 11, by Bd. Pub. Wks., for 72,556 sq. ft. of cement walk, and 4,909 lin. ft. of cement curb. A. J. Hammond is City Engr.

UNION CITY, IND.—Bids are asked until April 12 by the Common Council for macadamizing Carter St. to a width of 14 ft.

MENOMINEE, MICH.—JOHN STRIFFLER, of Marinette, Wis., has been awarded contract for paving 11,500 sq. yds. brick, at $1.86½; and ROBT. RICK, of Menominee, has been awarded contract for 10,700 sq. yds. macadam, at 65 cts. per sq. yd. Albert Haas, City Engr.

GRAND RAPIDS, MICH.—We are officially advised that the following were the lowest bids received March 25 for several paving contracts: West Bridge St., C. J. Carpenter, $27,519; Scribner St., one section, James McDermott & Son, $39,163; Scribner St., second section, James McDermott & Son, $22,904. L. W. Anderson is City Engr.

EDWARDSVILLE, ILL.—We are officially advised that A. F. FRANKS, Jacksonville, Fla., has been awarded contracts for paving and curbing at a total cost of $32,602. Charles A. Sheppard is City Engr. and H. P. Holz, Pres. Bd. Local Improvements.

ALTON, ILL.—Bids are asked until 2 p. m. April 9 for brick and macadam paving on several streets, aggregating about 17,000 sq. yds. T. M. Long, Engr. and Secy. Bd. Local Improvements.

We are officially advised that bids will be asked in the latter part of this month for paving a number of streets. Edward Beall is Pres. Bd. Local Improvements.

GLENCOE, ILL.—We are officially advised that Smith & Brown, 78 LaSalle St., Chicago, and Edward M. Laing, Highland Park, Ill., were lowest bidders on two paving contracts, at $9,694 and $9,983 respectively. Bids were opened March 20 by Frank A. Windes, Engr.

CHICAGO, ILL.—It is reported that the council has passed an ordinance for the paving of Woodlawn Ave. and Sheridan Drive with bitulithic pavement.

CHAMPLAIN, ILL.—Three streets will be paved, according to reports, at an estimated cost of $50,000. J. B. Fairclo is City Engr.

STREATOR, ILL.—The council is reported to have passed ordinances providing for the paving of S. Illinois, 9th, 2d, Sterling, W. Stanton and N. Wasson Sts.; estimated cost, $33,932.

EAST ST. LOUIS, ILL.—We are officially advised that City Engr. Crocken has made an estimate for the improvement of 11th St. from Bond Ave. to the Illinois Central R. R., a distance of about 2,300 ft. There will be required 3,741 ft. of limestone curbing, and 7,681 sq. yds. of vitrified brick paving, on 6 ins. of concrete. W. J. Crocken is City Engr.

EDWARDSVILLE, ILL.—A. F. FRANK, of Jacksonville, Ill., has been awarded contract for paving Main and Kansas Sts., at $18,870. Chas. A. Shepherd is City Engr.

BOONE, IA.—MAGDEN & SHEELEY, of Des Moines, Ia., have been awarded the street paving contract in this city.

DES MOINES, IA.—Bids are asked by W. W. Wise, Chn., until noon, April 16, for curbing Ascension St., requiring about 2,140 sq. yds. paving and 1,146 ft. curbing.

ST. PAUL, MINN.—The Board of Public Works has awarded the contract for paving John St., to FIELDING & SHEPLEY, for $11,695.

WINONA, MINN.—Bids are asked until April 16 for paving portions of several streets. G. P. Coleman, City Engr.

ST. PAUL, MINN.—The City Engineer has submitted estimates to the Board of Public Works for street improvements to cost about $20,000.

BOZEMAN, MONT.—It is reported that the TWO MIRACLES CO. have been awarded the contract for paving several streets here.

INDEPENDENCE, MO.—The City Council is reported to have passed ordinances providing for the paving with brick portions of South Liberty and East Lexington Sts.

DALLAS, TEX.—A citizens' committee appointed to confer with the City Council concerning the proposed contract for paving Ervay St., has reported as follows: "We have had under consideration the various bids made by the contractors and filed with the city engineer, and after very careful deliberation recommend that the bid of C. H. Wells, for bitulithic pavement, construction of curbing and sidewalk be accepted and contract to be awarded tt Mr. Wells. This contract calls for 41,195 sq. yds. of bitulithic paving at $2.35½ per sq. yd. E. L. Dalton is City Engr.

PUEBLO, COLO.—The contract for paving Santa Fe Ave. was awarded to the CLEVELAND TRINIDAD PAVING CO., for $67,814.

TACOMA, WASH.—It is reported that 6th Ave. and K St. will be paved with asphalt, brick gutters and cement curb. Frank L. Davis is City Engr.

SEATTLE, WASH.—McADAM & CANNON, of this city, have been awarded contract for laying concrete sidewalks on 30th Ave., at $4,673.

LOS ANGELES, CAL.—It has been decided to grade, curb, gutter and sidewalk Fremont Ave. from Grevilla to Columboa; also to finish the grading, curbing and guttering of Meridian St.

Contract has been awarded H. CUSHING for paving and grading Hope St.

SACRAMENTO, CAL.—The Board of Trustees has directed the City Surveyor to present specifications for paving Front St. from I to N St. with basalt blocks, on a concrete foundation; estimated cost, $75,000. Geo. N. Randle is City Engr.

MANUFACTURING PLANTS.

The names of parties awarded contracts are printed in capital letters.

SACO, ME.—York Mfg. Co., of Saco, Me., will erect a 4-story mill, brick, 227 × 85 ft. The company has prepared plans.

BROCTON, MASS.—Howard & Foster, shoe manufacturers, will soon build a new 4-story factory, 330 × 50 ft., to have 75,000 sq. ft. of floor space. The new building is to be completed for occupancy by the latter part of the summer.

NORWOOD, MASS.—Winslow Bros. & Smith, of this place, have had plans compelted for a factory for the manufacture of leather. The building will be six stories, concrete, fireproof, 80 × 100 ft. Bids have been received but as yet no contract awarded.

WESTFIELD, MASS.—We are advised that the H. B. Smith Co., steam heating apparatus, has decided to enlarge its plant.

PROVIDENCE, R. I.—We are officially advised that the Rumford Chemical Works, this city, will erect a 5-story brick storage building, 40 × 75 ft. It will be of factory construction. No engines or boilers. Plans not ready. W. R. Walker & Son, 17 Custom House, Providence, R. I., are Archs.

STERLING, CONN.—The United States Finishing Co., which has offices at 320 Broadway, New York, is reported to be planning the erection of a mammoth new plant here for the manufacture of cotton finishings. Cost estimated at $400,000.

NORWALK, CONN.—The St. George Pulp & Paper Co., manufacturers of wall and newspaper, have completed plans for the erection of an addition to its plant. The structure will be 60 × 150 ft., and will be built of iron.

NEW LONDON, CONN.—The New England Boiler Co. has perfected plans for the erection of a new plant in New London, Conn.

BINGHAMTON, N. Y.—The Pennsylvania Pnuematic Pump Co. will remove from Davenport, Iowa, to Binghamton, N. Y., where it will be reorganized under the name of the Binghamton Pump Co., and a new plant to cost about $20,000 will be erected.

NEWFANE, N. Y.—The Fr a Preserving Co., of Fredonia, N. Y., decided to erect a $35,000 branch facto n Newfane village.

ROCHESTER, N. Y.—The tracts for erecting a new paper mill, 168 ft., for the Flower City Paper Mill have been awarded to JOHN B. WEGMA r the carpentry, and to AUGUST HEI ER for the masonry. The building will f fireproof construction, and modern ma ry will be installed. Cost, $60,000.

JERSEY CITY, N. J.—Pla have been completed for the erection of tory brick cold storage building for the tern State Refrigerating Co., at 15th ear Henderson. The building will be and concrete, mill construction, 50 × ft. Kirkman & Parlett, Springfield, M re Archs.

STOCKERTOWN, PA.—It i rted that the Atlantic Portland Cement will erect a cement manufacturing plant his place. Henry D. Maxwell, Easton, Pa nterested.

WILMINGTON, DEL.—The Gas Engine Wks., 33d and Walnut Philadelphia, Pa., will remove its plan Wilmington, and the first building to b cted will be of steel, 600 × 130 ft.

WASHINGTON, D. C.—RIC DSON & BURGESS, Colorado Bldg., th ty, have been awarded the contract for tory carriage warehouse for E. Bergdo he building will be of brick and steel d will be fireproof.

NORFOLK, VA.—It is repo that the Martin Ship Cleaner Co. is mplating building a plant at Norfolk f he manufacture of the ship cleaning m ne. The plans for the building and the machinery, etc., to be installed ar ow being prepared.

GREENSBORO, N. C.—The W n, Miles Co., of Greensboro, has inco ated and it is said it will erect a y building, 50 × 170 ft., which will be ipped for making patented wood mortisin d sanding machines, and an office building, 3-stories, 35 × 50 ft. Work of struction will be started about May 1, nd about $30,000 will be spent on building nd equipment.

SAVANNAH, GA.—The Decatur Car Wheel & Mfg. Co., of Birmingham, Ala., will establish a plant here for the manufacture of car wheels. Capacity, 200 wheels daily. W. J. Morrison is Pres.

BESSEMER, ALA.—It is reported that the United States Cast Iron Pipe & Foundry Co. is proceeding with enlargements which had previously been begun, but were temporarily suspended. These improvements include a 150-ft. extension to the main building, providing space for an additional pit, the erection of three modern core-drying furnaces, the installation of large traveling cranes, etc., at a cost of about $100,000. Contracts for the new machinery required are reported as having been awarded.

MEMPHIS, TENN.—It is reported that J. N. Falls will erect an 8-story factory building at 20-22 North Front St., 50 × 148 ft. The plans for the new building have not yet been drawn. It will be of fireproof construction, built of pressed brick.

HOPKINSVILLE, KY.—Plans have been completed and work will soon be commenced on a large new rehandling tobacco plant and warehouse to be erected here by the American Snuff Co. Cost, $50,000.

ARLINGTON, KY.—BARNARD & LEO, Moline, Ill., have been awarded the contract for mill machinery for the new plant of the Arlington Roller Mills, Flegle Brothers, proprietors. Contracts are open for an 85 to 100 HP. boiler, enclosed water heater, and 350 to 400 light dynamo and equipment. Three 4-story buildings are to be erected; frame, steel enclosed. Estimated cost of buildings, $5,000; equipment, $10,000 to $15,000. Wm. Ebert, 1424 Midland Ave., Louisville, Ky., is Arch.

DAYTON, O.—It is reported that the National Cash Register Co. has awarded the contract to erect a 5-story brick factory to the NOEL CONSTRUCTION CO., of Baltimore, Md. The contract price is reported to be $1,000,000.

PORT CLINTON, O—It is reported that the Toledo, Port Clinton & Lakeside Railway Co. will build a car barn and repair shop at a point about one mile east of Port Clinton. The building will be 180 × 100 ft., and contain office, storeroom, inspection and repair tracks; also smith shop and winding room. T. R. Wickenden, Toledo, is Ch. Engr.

FOSTORIA, O.—It is stated that the Crouse-Tremaine Carbon Co. (A. N. Barron, Vice-Pres.) proposes erecting one building, 300 × 80 ft., one 60 × 200 ft., one 60 × 100 ft. and one 60 × 140 ft., and will need new machinery as follows: Gas eugines of 200 HP.; machine shop equipment of lathes, etc.; shafting and hangers and elevating and conveying machinery.

TOLEDO, O.—The Toledo Metal Sign Co., whose plant was destroyed by fire a short time ago, has completed plans for a new plant, giving it about double its former capacity. D. O. Douglass is Mgr.

CLEVELAND, O.—The Cleveland Armature Works Co. has completed plans for a 3-story factory building to be erected on St. Clair and Kirtland Sts. It will have 50,000 sq. ft. of floor space. The company will install considerable new machinery, which will be equipped with its own motors. The company is now making motors up to 10 HP. and expects soon to build motors up to 25 HP.

SPRINGFIELD, O.—It is reported that the Lagonda Manufacturing Co., making boiler tube cleaners, will soon commence the erection of a new plant at Springfield.

CLEVELAND, O.—We are advised that the King Bridge Co. will erect another factory building at its plant, also a temporary engine room.

ELYRIA, O.—[illegible] Elyria Iron & Steel Co. is reported to b[illegible]anning to double the capacity of its p[illegible] by the erection of a rolling mill of th[illegible]me capacity as the one now in operati[illegible]

DETROIT, M[illegible]—Plans have been completed for a[illegible]g plant for the Beck Cereal Co., 2[illegible]ngress St. West, Detroit. Cost, $80,00[illegible]atton & Baldwin, 1103 Union Trust [illegible] Detroit, are Archs.

DETROIT, [illegible]H.—Stratton & Baldwin, Archs., 1103 [illegible] Trust Bldg., Detroit, are preparing pla[illegible]r a new milling plant to be erected [illegible] the Deck Cereal Co., 245 Congress St. W[illegible] to consist of a new mill, warehouse, p[illegible] building and office. New plant will be [illegible]nd four stories high, 310 × 50 ft., brick [illegible] mill construction. Estimated cost, [illegible]

GRAND RA[illegible]S, MICH.—Work has been started by th[illegible] J. Heintz Co. on demolishing present [illegible] building on Madison Ave. and the Pe[illegible]rquette R. R., preparatory to the erecti[illegible] a new 4-story modern brick structure on [illegible] present site. New plant is to be mo[illegible] in every detail, and will cost $60,000.

BATTLE [illegible]EEK, MICH.—The Union Steam Pump [illegible] of this city, will build an addition to [illegible] plant.

KALAMAZ[illegible] MICH.—It is reported that the Burtt M[illegible]facturing Co., manufacturing gasoline eng[illegible] automobiles, etc., will build a new plant.

CHICAGO, ILL.—The Holman Automobile Co., it is [illegible]d, will construct a $20,000 building.

GRANITE CITY, ILL.—The American Steel Foundry Co. is planning extensive additions to foundry located here. Estimated cost of improvements, $200,000.

GRANITE CITY, ILL.—It is reported that the American Steel Foundry Co. will erect extensive additions to its foundry. Estimated cost of improvements, $200,000.

MILWAUKEE, WIS.—Plans have been completed for the $75,000 addition to Fred Usinger's sausage factory at 302 Third St. Leiser & Holst, 402 Germania Bldg., Milwaukee, are Archs.

CUDAHY, WIS.—We are informed that contracts have been awarded and work will soon begin on extensive improvements to the plant of the Power and Mining Machinery Co., of Milwaukee. The improvements include a 200-ft. extension to the foundry and the installation of special equipment. Total cost will be about $300,00.

MILWAUKEE, WIS.—Plans have been completed for the erection of a large addition to the Smith Machinery Co.'s plant located in this city. New addition is to be erected to present plant at 26th and Canal Sts., to cost about $75,000.

Plans have been completed and work will soon be commenced on a large addition to be erected to the plant of the Reliance Boiler Works, near Locust and 32d Sts. New building is to be 100 × 100 ft. Estimated cost, $50,000.

DES MOINES, IA.—It is reported that the Iowa Ice Co. will build an artificial ice plant at this place.

ST. PAUL, MINN.—The C. A. Stickney Realty Co., C. A. Stickney, Pres., plan improvements and factory extensions on the west side levee to the amount of $200,000. Several 3-story factories will be built.

ST. LOUIS, MO.—About June 1 the Wagner Electric Mfg. Co. will let contract for buildings on its new site, comprising nearly 14 acres. Site cost $75,000. W. A. Layman is Gen. Mgr.

ST. LOUIS, MO.—We are officially informed that the contract for erecting the shops for the Wabash Railroad Co., at Decatur, Ill., was awarded to JAMES STEWART & CO., St. Louis, Mo.

SAN FRANCISCO, CAL.—We are officially advised that the California Petroleum Refineries, Ltd., San Francisco, will erect an oil refinery at an estimated cost of $1,000,000 at San Luis Bay. Several contracts have been awarded and others remain to be let. The contracts let so far are to the RISDON IRON WORKS, San Francisco; est. value, $100,000. LACY MFG. CO., Los Angeles, $120,000. A. M. Hunt, Engr.

SYDNEY, N. S.—S. V. Huber & Co., Consulting Engrs., Ferguson Building, Pittsburg, Pa., are reported to be preparing plans for a Bessemer steel plant to be built by the Dominion Iron & Steel Co., at Sydney, Cape Breton, N. S.

MISCELLANEOUS CONTRACTS.

The names of parties awarded contracts are printed in capital letters.

STEAM ROAD ROLLER.—Melrose, Mass.—See under Streets and Roads.

DOCK.—West Fort William, Ont.—Contract for 1,500-ft. dock for the Grand Trunk Pacific Ry. has been awarded to BARNETT & McQUEEN, of Fort William.

STEEL TUG.—Duluth, Minn.—Bids are asked until May 2, noon, for building a steel tug, complete. Major Charles L. Potter, Engrs. (Advertised, Engineering News.)

COAL PIER.—Newport News, Va.—It is reported that the Chesapeake & Ohio Ry. Co. will soon begin the erection of a new coal pier at Newport News, Va., north of pier 10.

TWO BATTLESHIPS.—Washington, D. C.—Bids are asked until noon, June 2, by Charles J. Bonaparte, Secy. of the Navy, for construction of two battleships (Nos. 26 and 27).

PIER EXTENSION.—Sparrows Point (Baltimore), Md.—Permission has been granted the Maryland Steel Co., at Sparrows Point, Md., to extend its large ore pier 250 ft.

CANALS.—Portland, Ore.—We are officially advised that bids will be received probably after May 1st for canal work in connection with the Umatilla and Okanogan projects. Plans are being prepared now. D. C. Henny is Supervis. Engr., Portland, U. S. Geological Survey.

READERS' WANTS FOR THOSE IN THE MARKET

The readers of ENGINEERING NEWS are constantly in the market for great quantities of machinery, tools and general supplies. While our thousand advertisers are usually able to furnish the material desired, yet there are many things wanted by our readers that are not advertised, although connected with engineering and contracting directly or indirectly. This department (R-W) is for this class of inquiries, and we urge our readers to keep us informed. Enclose five cents in stamps and we write to a number of leading manufacturers without further cost. When writing to our advertisers, who are the leaders in their respective lines, **mention Engineering News.** Have you a copy of our Buyers' Guide? **Engineering News Can Help Buyers.**

ENGINE.—Berea, W. Va.—We note that E. J. Bee, Jr., is in the market for a gas or gasoline engine.

CARS.—Newark, O.—W. P. Mason, C. E., is desirous of names of firms manufacturing inter-urban cars with gasoline motors.

STEAM ROAD ROLLER.—Chicago, Ill.—We note that Charles M. Porter, 84 La Salle St., is in the market for a 10-ton steam road roller.

CONCRETE BLOCK MACHINES.—Joppa, Tenn.—We note that George W. Bolinger is in the market for machinery for making concrete blocks.

SMOKE CONSUMERS.—Louisville, Ky.—The Laib Co., of this city, is desirous of all information pertaining to the various styles of smoke consumers.

CONCRETE BLOCK MACHINERY. — Santiago De Chili.—We note that Hormidas Herniquez, C. E., solicits data on cement and concrete block machinery.

STEAM SHOVEL.—Richmond, Va. — We note that C. B. Ford & Co. are in the market for a small steam shovel, with dipper capacity not to exceed 1½ yds.

ELECTRICAL MACHINERY. — Atlanta, Ga.—The De Loach Mill Mfg. Co. desire to purchase one 10-HP. electric motor and one 25-HP. generator, either new or second-hand.

SEWING MACHINE MANUFACTURERS' SUPPLIES AND MECHANICAL ENGINEERS.—Takaramachi Sauchone, Magoya, Japan.—We are in receipt of a letter from H. Sakurai, which states that he has been in the sewing machine business for several years and is now desirous of manufacturing the same. He wishes to communicate with firms making tools and machines suitable for that purpose, with names of engineers who would make plans and specifications for equipment.

GALVANIZED IRON.—Lyons Falls, N. Y.—We are informed that O. E. Davis & Co. are in the market for galvanized iron for roof and sides of a new warehouse which they expect to erect soon.

CEMENT SHINGLE MACHINE AND CONCRETE MIXER.—Stuart, Neb.—We note that the Stuart Artificial Stone Co. is in the market for a cement shingle machine and a small power or good hand concrete mixer.

COLLAPSIBLE SEWER FRAMES.—Calgary, Alta.—T. W. Thorold, City Engr., has written us in reference to the names of firms making collapsible steel sewer frames. He desires information on the above subject at once.

DITCHING MACHINERY.—Knierim, Ia.—Moeller Bros., General Contractors and Engineers, we are informed, are in the market for ditching machinery for constructing small drainage ditch in wet soil. Ditch will measure 3 to 9 ft. in depth, and 4 to 10 ft. in width. The weight of the machine should not exceed 40,000 lbs. in weight.

GASOLINE ENGINES.—Plainfield, N. J.—Chas. H. Frost, Mgr. Courier-News, informs us that he wants catalogues, information etc., regarding small gas engines for printing office. A large firm in Canada also wants such catalogues, and it is suggested that letters, etc., for the Canadian firm be sent to E. H. F., care Engineering News, New York.

CEMENT WALLS.—Montreal, Can.—We are informed by Kennedy Stinson, Mgr. of the Stinson-Reeb Builders' Supply Co., that he has a particularly large project of installing a piggery on an experimental farm. He purposes putting in cement floors, with hollow concrete walls seven feet high. He also intends to construct a concrete tunnel about 1,500 ft. long, 6½ ft. high and 4 ft. wide. He wishes tt communicate with people interested.

HARBOR LOCK.—Moline, Ill.—The contract for construction of the harbor lock at Moline has been awarded to the DRAVO CONTRACTING CO., of Pittsburg, Pa., at $167,817.

DOCK EXTENSION.—Superior, Wis.—WHITNEY BROS., of this city, have been awarded contract for building an extension to the Omaha Dock at Itasca (Superior post-office).

FREIGHT BOATS.—Toledo, O.—The TOLEDO SHIPBUILDING CO. has contracts for building two 7,500-ton freighters; one for the L. C. Smith Transit Co. and the other for Frank E. Kirby and others.

CONCRETE DAM.—Granite Falls, N. C.—ABEE & EDWARDS, of Hickory, N. C., have been awarded contract to build concrete dam across Gunpowder Creek for Granite Falls Mfg. Co., at Granite Falls, N. C.

DREDGING.—Jacksonville, Fla.—Bids are asked until noon, April 23, for dredging at Dames Point Shoal, St. Johns River, between Jacksonville and Mayport. Maj. Francis R. Shunk, Engrs. (Advertised, Engineering News.)

DREDGING.—Los Angeles, Cal.——The North American Dredging Co., 95 Market St., San Francisco, submitted a bid on March 21, to Capt. Amos A. Fries, Corps Engrs., U. S. A., for dredging 9,091 cu. yds. at San Diego Harbor, at 99 cts. per cu. yd.

REVETMENTS, ETC.—Chicago, Ill.—Bids are asked until noon, May 2, for excavating the outlet from Lock 29, into Rock River; building crib revetments and backfilling around them. Lieut.-Col. W. H. Bixby, Engrs. (Advertised, Engineering News.)

RIVER WALL, ETC.—Philadelphia, Pa.—Bids are asked until 11 a. m., April 9, by Jesse T. Vogdes, Ch. Engr., Comrs. of Fairmount Park, for river wall, Peter's Island, Speedway and connecting drive, and iron fence and frame sheds in Zoological Garden.

CEMENT.—Wheeling, W. Va.—Bids are asked until 11 a. m., April 28, for furnishing and delivering about 4,200 bbls. of American Portland cement for Lock No. 4, Little Kanawha River (Palestine transfer, W. Va.). Major Geo. A. Zinn, Engrs. (Advertised, Engineering News.)

DEEPENING CANALS.—Leesburg, Fla.—We are advised by L. M. Johnson, Town Clerk, that bids are desired for deepening canals at Leesburg. The estimated quantity of mud and sand is 70,650 cu. yds. Est. cost, $7,000 to $8,000. R. Woodward, Jacksonville, Fla., is Designing Engineer.

TAILINGS PLANT.—Colorado City, Colo.—J. D. Hawkins, Gen. Mgr. of the U. S. Reduction & Refining Co., advises us that plans are completed and machinery purchased for a tailings plant in this city. The construction work will be done by the company itself. Est. cost is $200,000.

ORE DOCK.—Duluth, Minn.—A building permit has been granted to the Duluth, Missabe & Northern Ry. Co. for its new ore dock at Duluth. The permit, which did not include the cost of the four miles of railroad tracks to be laid on the dock, calls for a structure to cost $500,000. H. L. Dresser is Ch. Engr., at Duluth.

DITCH.—Elgin, Ill.—We are officially advised that the Commissioners of the Plato and Rutland Drainage District will receive bids until April 20, at office of Egan & Luther, Elgin, Ill., for construction of about eight miles of open ditch. Average depth, 6 ft., bottom width, 6 to 12 ft. Material, vegetable mold and drift. H. D. Barnes, Secy., Elgin, Ill.

TELEPHONE SYSTEM.—Salt Lake City, Utah.—Specifications and bidding sheet for installing a telephone system (having four telephone stations and about 35 miles of pole line), in connection with the Strawberry Valley Reclamation Project, are on file at New York office of Engineering News. Advertised in Engineering News, beginning March 15. Bids are asked until May 2d.

WHARF.—Bremerton, Wash.—Bids were received as follows on March 31 for construction of timber wharf No. 7 at Puget Sound Navy Yard: Puget Sound Bridge & Dredging Co., 95 Yesler Way, Seattle, Wash., $34,873; Cotton Bros. & Co., 241 Bacon Bldg., Oakland, Cal., $42,783 (deduct $2,500 conditionally); International Contract Co., 737 N. Y. Block, Seattle, Wash., $36,814. Noted on March 1st.

FLOATING DRY-DOCK.—Buffalo, N. Y.—We are officially advised that the MANITOWOC DRY-DOCK CO., of Manitowoc, Wis., has commenced the construction of a large steel floating dry-dock, which will be installed at the plant of the Empire Ship-Building Co., at Buffalo, N. Y. The Dry-Dock Co. designed the dock, and will build it, complete, including pumps. Charles G. West is Mgr., at Manitowoc.

DAM.—Billings, Mont.—Bids are asked until May 10 for the construction of the Lower Yellowstone dam, a rock-filled timber-cribbed structure, requiring about 500,000 ft. of lumber, 700 piles, 1,600 sheet piles, 11,000 cu. yds. of rock filling and riprap, and 800 tons of steel, located about 18 miles northeast of Glendive, Mont. Thos. Ryan, Acting Secy., Dept. of Interior, Washington, D. C. (Advertised, Engineering News.)

STEEL BARS. — Glendive, Mont.—The Secretary of the Interior has awarded to JOHN BLAKE KENDALL, of Washington, D. C., a contract for furnishing about 427,000 lbs. of square steel bars for reinforcement of concrete in connection with the Lower Yellowstone irrigation project, North Dakota and Montana. Mr. Kendall's bid was 1 6-10 cts. per lb., f. o. b. cars at Pittsburg, Pa. Noted on March 22.

IRRIGATION DITCHES.—Hazen, Nev.—Plans, specifications and bidding sheet for irrigation ditches are on file at office of Engineering News, New York. Bids are asked until 10 a. m., April 19, for construction of about 145 miles of irrigation ditches, involving about 600,000 cu. yds. of excavation, with structures and bridges, in Carson Sink Valley, Nev. Advertised in Engineering News from March 15 to April 5.

OIL REFINERY.—San Francisco, Cal.—We are officially advised that the California Petroleum Refineries, Ltd., San Francisco, will erect an oil refinery at an estimated cost of $1,000,000 at San Luis Bay. Several contracts have been awarded and others remain to be let. The contracts let so far are to the RISDON IRON WORKS, San Francisco; est. value, $100,000; LACY MFG. CO., Los Angeles, $120,000. A. M. Hunt, Engr.

GRAND RAPIDS, MICH.—Bids were received on March 14 by Col. M. B. Adams, Corps Engrs., U. S. A., for dredging (a) harbors on east shore of Lake Michigan, no amount stated; (b) Saugatuck Harbor, 67,500 cu. yds. (price given per cu. yd.) as follows: GREAT LAKES DREDGE & DOCK CO., Chicago, Ill. (awarded contract), (a) 17 cts., (b) 16.9 cts.; John Smith, Manistee, (a) 17 cts.; Jos. Wolter, Sturgeon Bay, Wis., (a) 18 cts., (b) 20 cts.; The Fitz Simons & Connell Co., Chicago, Ill., (a) and (b) 19 cts.; Samuel O. Dixon, Milwaukee, Wis., (a) and (b) 22 cts. Noted on March 22.

CEMENT.—Wheeling, W. Va.—Bids were received as follows on March 27 by Major George A. Zinn, Corps Engrs., for furnishing and delivering American Portland cement for Dams Nos. 13 and 18, Ohio River: (a) bidder; (b) in paper; (c) in wood; (d) brand: (a) The Kelley Island Lime & Transport Co., Cleveland, O., per bbl.: (b) $1.58; (c) $1.85; (d) Northampton. (a) The Atlas Portland Cement Co., New York, N. Y., per bbl.: (b) $1.48; (c) $1.75; (d) Atlas.

STEAM SHOVELS.—Boise, Idaho.—The Secretary of the Interior has granted authority to the Reclamation Service to purchase from the ATLANTIC EQUIPMENT CO., of New York, two steam shovels for use in the prosecution of the construction of canal and embankments in connection with the Payette-Boise project, Idaho. The bid of the Atlantic Equipment Co. was for two 70-ton, 2½-yd. shovels at $8,750 each, delivered f. o. b. cars at Richmond, Va.

DITCH.—Centerville, Ia.—W. B. BERRY, of Centerville, has been awarded contract for constructing the Chariton River ditch at 12½ cts. per cu. yd. for the excavation of about 217,000 cu. yds. Total cost, $27,125. Bids were received on March 19th. The other bidders were: Chas. R. Lewis, Friscola, Ill., 13.75 cts. per cu. yd.; R. H. McWilliams, Mattoon, Ill., 12.45 cts.; C. H. Stemberg & Son, South Bend, Ind., 13.75 cts.; N. C. McGinnis, Bennett, Ill., 13.64 cts.

LOCK GATES.—Pittsburg, Pa.—Bids were received as follows on March 30 for building five pairs of lock gates and anchorages (for new lock No. 3, Monongahela River): On bid No. 1 (for all structural parts to be 3% to 4% nickel-steel) the Penn Bridge Co., Beaver Falls, Pa., was lowest bidder, at $6,095. On bid No. 2 (for all structural parts to be of medium steel) N. D. Yant & Co., Allegheny, Pa., were the lowest, at $3,591. Itemized prices will be given next week, under Contract Prices.

SEA-WALL.—Coronado, Cal.—Bids are asked until April 20 for construction of a riprap stone sea-wall along the ocean front for nearly one mile, for the purpose of protecting the ocean front from further erosion by the Pacific Ocean, and involving about 67,000 tons of rock, 53,000 cu. yds. of back fill, 48 ft. of 12-in. c.-i. pipe, 100 ft. of 12-in. sewer pipe, two catch basins, conglomerate gravel for paving 115,000 sq. ft. of the Boulevard six ins. thick; 1,900 cu. yds. of gravel or stone. W. Tilden Clark, City Clerk.

DREDGING.—Philadelphia, Pa.—Bids received on Mar. 15 by Maj. J. C. Sanford, Corps Engrs., for rehandling dredging material, have been rejected, the four first being excessive in price and the fifth informal. The following are the bids received: Ellicott Machine Co., Baltimore, Md., $76,500; Alex. Miller & Bro., Jersey City, N. J., $77,000; Monad Engineering Co., New York, N. Y., $78,850; Maryland Steel Co., Sparrows Point, Md., $78,000, and Jas. Reilly Repair & Supply Co., 78 Beach St., New York, N. Y., $44,350.

QUAY WALL.—Bremerton, Wash.—The following bids were received on March 31 by the Bureau of Yards and Docks, Navy Dept., Washington, D. C., for extension of quay wall east of dry dock, at Puget Sound Navy Yard: International Contract Co., 737 N. Y. Block, Seattle, (item 1), $45,336, (item 3), $39,149. Puget Sound Bridge & Dredging Co., 95 Yesler Way, Seattle, (item 1), $44,873, (item 2), $44,873; Cotton Bros. & Co., 241 Bacon Bldg., Oakland, Cal., (item 1), $43,994; T. Ryan, 28 Sullivan Bldg., Seattle, (item 1), $29,000, (item 2), $28,400.

HARBOR BOAT.—St. Louis, Mo.—The Board of Public Improvements on March 27 opened bids for constructing new harbor boat which is to replace the Mark Twain. There were three propositions: Howard Ship-Yards Co., Jeffersonville, Ind., $59,858; Springfield Boiler & Mfg. Co., Springfield, Ill., $55,695; Dubuque Boat & Boiler Works Co., Dubuque, Ia., $61,175. This bid was rejected, because it was not accompanied by a certified check. Bids were received for the construction of a concrete bridge over the River des Peres to replace the old bridge on Manchester Ave. The lowest bid was that of the Meyer Construction Co., at $6,329.

FIRE-ALARM SYSTEM. — Washington, D. C.—Walter C. Allen, Electrical Engr., D. C., informs us that the District Commissioners have asked Congress for certain sums of money for the proposed extension and general improvement of the District fire-alarm system. No further steps will be taken until Congress acts upon these recommendations. It is estimated that $75,000 will be required for replacing the paper-insulated underground fire cables with rubber-insulated cables; $18,500 for the purchase of 65 additional fire-alarm boxes, and about $18,000 for number of miscellaneous repairs. H. B. F. Macfarland, District Comr.

DREDGING. — New Orleans, La.—Bids were received on March 28 for dredging channels at mouth of Calcasieu River, La., and for building rock revetment, by Capt. J. F. McIndoe, Engrs., as advertised in Engineering News on March 1st. We are officially advised that it has been recommended that the contract be awarded to the Bowers Southern Dredging Co., of Galveston, Tex., for dredging and marking channel at 9 9-10 cts. per cu. yd. (for 332,000 cu. yds.), and at $17.60 per pile (for 162 piles). Also that contract be awarded to Charles Clarke & Co., of Galveston, for rock for revetment at $2.94 per ton (for 18,000 tons). Est. cost, $88,639.

BREAKWATER.—Oswego, N. Y.—We are officially informed that plans for rebuilding about 1,200 lin. ft. of the outer breakwater with timber at Oswego, N. Y., have been approved. Bids were opened at Buffalo by Col. H. M. Adams, Engr.-in-Charge of this District, on March 9th, for furnishing 1,-

003,325 ft. B. M. of Oregon fir or white pine. POST & HENDERSON CO., of Oswego, N. Y., were the lowest bidders, their price being $34.90 per M., and their bid was recommended for acceptance. WALBRIDGE & CO., of Buffalo, were the lowest bidders for furnishing the iron. The work will be done by day labor. John C. Churchill is Asst. Engr., U. S. Engrs. Office.

SUBWAY.—Buffalo, N. Y.—We are officially advised that William Barclay Parsons, Consult. Engr., 60 Wall St., New York, is preparing plans for the proposed subway to be built by the Buffalo Subway R. R. Co. As soon as plans are completed, the company will apply for franchise, and after that will apply to the State Board of Railroad Commissioners. Company was incorporated recently, with $1,000,000 capital, by Frank S. McGraw, 616 Ellicott Sq., Buffalo; William B. Cutler, of Buffalo. Albert W. Bonynge, a member of the firm of Black, Olcott, Gruber & Bonynge, 170 Broadway, New York; and Theodore B. Chancellor, Fred Bard, Henderson Peck, Edward McInnes and Harry M. Spence, lawyers, also connected with this firm. The proposed line is to run from the foot of Carolina St. through Court St., and then across the east side of the city, going into the town of Cheektowaga, to be about eight miles long.

TUNNEL.—St. Louis, Mo.—Edward Flad, Consult. Engr., Fullerton Bldg., St. Louis, writes us that the proposed tunnel under the Mississippi River, which will be built by the Manufacturers' Railway Co., is merely in a formative stage, and that no definite plans have been decided upon. In connection with the project, the following information appeared in the St. Louis "Republic" recently: "The Manufacturers' Railway will, according to August A. Busch, construct a $3,000,000 tunnel under the Mississippi River, in order to connect the road's terminals in St. Louis with its terminals in Illinois. Mr. Busch says that a tunnel can be built, and that it will be practicable. Should the railway not construct a tunnel, it will erect a bridge. At present it is operating a transfer ferry. The new terminal and railroad project of the St. Louis Manufacturers' Railway, which is controlled by the Anheuser-Busch Brewing Association, will give St. Louis a new outlet to the Gulf of Mexico, and probably a new outlet to the Northwest. It will also be a competitor of the immense terminal system which the Missouri Pacific and Iron Mountain System is constructing in South St. Louis, at West Ivory Station, at East Ivory Station, Ill., and at Dupe and Bixby, Ill."

SUPPLIES.—Washington, D. C.—Bids are asked by H. T. B. Harris, Paymaster Gen., U. S. N., Washington, until 10 a. m., April 10, for the following supplies: Schedule 434: At the Navy Yard, Boston, Mass., and the works of the Fore River Ship & Engine Company, Quincy, Mass.: circuit breakers, monkey wrenches, buffing lathe, portable furnaces, extruded brass, blue print paper. Schedule 433: At the naval torpedo station, Newport, R. I., electrical cable and supplies, tool steel, rubber washers, pipe fittings.

Schedule 436: At the Naval Academy, Annapolis, Md., bolts, etc., pig lead, packing, cast-iron pipe and fittings, gate valves, valve boxes and covers.

Schedule 433: At the Navy Yard, Washington, D. C., hydraulic jacks, sheet copper, aluminum, miscellaneous metals, solder, zinc, white metal, bar iron, roof trusses, rubber belting, sheet packing, pipe and fittings, steam traps.

Schedule 435: At the Navy Yard, Norfolk, Va.: Boiler test pump, asbestos gaskets. Schedule 437: Bolts and nuts, files, spouts, copper nails, padlocks, screws, blacksmiths' forges, emery cloth, pump, hydraulic and sheet brass, bronze rod, sheet zinc, cement compound, pipe fittings, gate and angle valves.

U. S. POSSESSIONS AND CUBA.

The names of parties awarded contracts are printed in capital letters.

MARSH RECLAMATION.—Honolulu, T. H.—The Board of Health has plans for improving the low-lying Waikiki marshes and for providing macadam streets in this section.

SEA-WALL. — Panama.—A press report from New Orleans, La., dated March 29, states that the UNITED FRUIT CO., 17 Battery Pl., New York City, has been awarded the contract to raise the town of Bocas del Toro, in Panama, 3 ft., to construct a sea-wall that will protect the town from tides, and to provide a complete sewer system and water-works.

DREDGING PLANT.—Matanzas, Cuba.—Bids are asked until 2 p. m., June 6, for furnishing to the government a dredging plant, composed of a dredge with an 8-yd. shovel and steel hull; four wooden scows of 500 cu. yds. capacity each; one steel steam tug, a duplicate of the Ignacio Agramonte (before, the Narciso Deulofeu, now in service in the District of Public Works of Havana); one wooden coaling barge of 200 tons; one wooden floating water tank of 42,500 gallons; one steel floating derrick of 40 tons, and one naphtha launch of 20 HP. Salvador Guastella, Ch. Engr., Dept. Public Works. (Advertised, Engineering News.)

RAILWAYS. — Philippine Islands. — The Philippine Railway Co., of Hartford, Conn., has filed a certificate of incorporation with the State Secretary of Connecticut. The authorized capital stock is $5,000,000. Arthur L. Shipman, Chas. A. Gross and Alvan W. Hyde, all of Hartford, Conn., are the incorporators. Company proposes to own and operate steam and electric roads in the Philippine Islands and elsewhere, also to do a general transportation business. The Philippine Railway Construction Co. has been incorporated in New Jersey with capital of $1,000,000, to build and operate railroads in the Philippine Islands and elsewhere. The incorporators include: A. C. Wall, 1 Exchange Place, Jersey City; J. P. Carter and E. B. Bruce, 52 William St., New York City.

MEXICO.

The names of parties awarded contracts are printed in capital letters.

BAKERY.—Campeche, Mexico.—A large biscuit bakery is to be established here by local capitalists.

WATER METERS.—Saltillo, Coahuila.—A plan is under consideration for the general introduction of water meters in the city of Saltillo, due to the extravagant use of water.

POLICE STATION.—City of Mexico.—$200,000 has been appropriated for the erection of a new police station building, the first of a series, in the sixth ward of the City of Mexico.

OBSERVATORY.—City of Mexico.—The government is to construct a central meteorological observatory in the Colonia de Tlaxpana in the immediate future. The building will occupy an entire block.

IRRIGATION.—Morelia, Mexico.—Francisco C. Garcia has obtained a concession from the federal government for the establishment of a large system of irrigation in this state. He will obtain the water supply from the Duero River.

FLOUR MILL.—Saltillo, Coahuila.—The Compania Harinera de Molinos de la Colena which was recently organized here with a capital stock of $100,000 has taken steps towards erecting flour mills with a capacity of about 80,000 lbs. of flour daily.

WHARF.—Puerto Viejo, Mexico.—The Southern Pacific company is preparing to build a large wharf here for its own use. The rails and other building material for its proposed Guaymas-Guadalajara line will be unloaded at this port.

LOCOMOTIVE PLANT.—City of Mexico, Mexico.—Thomas H. Wheless, acting as a representative of a syndicate of American capitalists, has made formal application to the federal government for a concession to establish a large plant here for the manufacture of steam and electric locomotives.

IRRIGATION.—Torreon, Mexico.—A large system of irrigation is to be established in the valley of the Nazas River near here by Fernando Duret, who has made application to the federal government for that purpose. The water supply will be obtained from the Nazas River.

RAILROAD IMPROVEMENTS.—City of Mexico, Mexico.—The Mexican (Vera Cruz) Railroad company is preparing to relay its entire road with steel ties. Large shipments of these ties have been received from England and the improvement work will soon be commenced. The road will make other important improvements.

ONYX QUARRIES.—Jimulco, State of Coahuila, Mexico.—The Societe Francaise des Onix du Mexique, which was recently organized in Paris, France, with a capital stock of 2,550,000 francs, is preparing to install considerable machinery at its onyx quarries situated near Jimulco and near Sombreretillo, state of Durango. The onyx from these quarries is said to be of fine quality. It will be exported to the United States and various European countries.

IRRIGATION.—La Olla, State of Chihuahua.—Maclovio Gamboa is arranging to install the necessary machinery for irrigating a large tract of land in the valley of the Conchos River near here. He has applied to the federal government for a concession to use the water of the Conchos River for the purpose.

RAILROAD.—Jalisco.—The Amparo Mining Co. has decided to construct a standard gage railroad, fourteen kilometers long, from the Santo Domingo mine to connect with the Mexican Central at Ahualulco. Ferdinand Sustersic, Gen. Mgr. of the company, may be addressed at Etzatlan, Jal.

ASPHALT PAVEMENTS. — Chihuahua, Chih.—Governor Enrique C. Creel, of Chihuahua, the capital city, states that an expenditure of $200,000 will be incurred in paving streets with asphalt. The streets which will be paved include those in the central portion of the city and around the Constitucion and Hidalgo plazas.

HYDRO-ELECTRIC PLANT.—Tequila, Jalisco.—Manuel R. Uruchurtu, a Mexico City lawyer, in behalf of R. G. Hart and Gilbert S. Payton, has applied to the Dept. of Fomento for a concession to take 10,000 liters of water per second from the Santiago River for power to generate electric energy for mining operations. The water is proposed to be taken in the San Martin hacienda in the municipality of Tequila.

DREDGING.—Tampico, Tamaulipas.—The subject of dredging the harbor of the port of Tampico is being agitated, and at a recent meeting of the Chamber of Commerce in that city it was decided to bring the matter to the attention of the federal government. It is said that if the dredging is not done the steamship companies will cease the use of deep draft steamers at the port, as many of them have grounded lately.

BELT RAILROAD.—City of Mexico, Mexico—The government system of railroads, which include the National, the Interoceanic, the International and the Vera Cruz & Pacific, have joined in an application to the federal authorities for a concession to build a belt railroad around this city. The San Rafael & Atlixco Railroad Company is also interested in the project. The proposed belt line will come in touch with many of the important manufacturing plants.

ELECTRIC RAILWAY. — Mexico City, Mexico.—A syndicate of Chicago capitalists, represented by R. H. Springer, is having a survey made for an electric railway from the Cuernavaca line of the Mexican Central to the city of Chilpancingo. The syndicate has options on more than two million acres in the valley of the Rio Balsas River. If these lands are purchased they will be colonized with American farmers. The electric power for operating the railway will be furnished from water falls.

RAILWAY CONSTRUCTION CONTRACT.—Chiapas.—A contract has been awarded to B. T. DAVIS, of the City of Mexico, by the Pan American Railroad Co., to complete the line from Pijijipan, in the state of Chiapas, south to the Guatemalan frontier, a distance of 241 kilometers. Under the terms of the contract work must be prosecuted from both ends of the line, and completed within eighteen months. J. M. Neeland, Vice-Pres. of the Railway Co., has arranged to open the general offices in the City of Mexico.

ROLLING STOCK.—Mexico.—The Mexican National Railroad Co. is preparing for the construction of 150 gondola freight cars of 36 tons capacity, 100 flat cars of same capacity, and 15 cabooses to be built in their own shops. They are to contract, in addition, for 300 box cars of 80,000 lbs. capacity, five combination baggage and express cars, three first class, three second class and three third class passenger coaches. The cars to be contracted for will be ordered within the next few weeks from the factory that can guarantee the earliest delivery. All the above equipment will be constructed after the latest designs, and fitted with air brakes and other safety devices. The passenger cars will be equipped with vestibules.

UNION RAILWAY STATION.—Vera Cruz, Vera Cruz.—The erection of a union station by the railroads entering Vera Cruz is projected. The following roads are interested: The Mexican, the Interoceanic, Vera Cruz & Pacific and Tehuantepec National. A terminal association representing the railroads has been formed, the officers being as follows :E. N. Brown, of the Interoceanic, Pres.; W. Marc[illegible], Gen. Mgr. of the Mexican, Vice-Pres.; [illegible] B. Body, the Tehuantepec, and T. J. [illegible]an, the Vera Cruz & Pacific. The buildings will be of stone and brick, and in addition to the depot and freight houses the erection of a large modern hotel is planned, and also a custom-house. The project has been submitted to the government for approval and it is expected to commence work within six months after the approval of the plans. The total cost of carrying out the improvements is estimated at $6,000,000.

RAILROAD.—City of Mexico, Mexico.—A survey of the cost of railway extensions now under construction, changing the gage on narrow gage roads, Vera Cruz terminals, etc., shows approximately expenditures of more than $60,000,000. The railways entering this city are to have a union station which, with the new terminals will probably cost $10,000,000. Soon after the opening of the Tehuantepec Railway for through traffic from ocean to ocean, the line will be double-tracked, making it the only double-tracked road in the republic. The new harbors at Coatzacoalcos, on the Gulf of Mexico, and Selina Cruz, on the Pacific, will shorten the time for freight shipments to New York and San Francisco by two or three days, and will also shorten the time between Europe and the west coast. It is believed the double track can be laid in eight months.

CONTRACT PRICES.

[Where (*) precedes items under Contract Prices the work was advertised in Engineering News.]

*SANITARY SEWER SYSTEM.—Rochelle, Ill.—Bids were received on Feb. 15 by the Board of Local Improvement for a 10.4-mile sanitary sewer system. The Iowa Engineering Co., Clinton, Ia., was the engineer. The itemized bids were as follows; (a) Des Moines Bridge & Iron Works, Des Moines, Ia.; (b) E. T. Webster, Chicago, Ill.; (c) Thomas J. Peter Co., Chicago, Ill.; (d) G. MAFFIOLI, Rickford, Ill. (awarded contract); (e) Harding & Nelson, Racine, Wis.; (f) Harding & Nelson, Racine, Wis.; (g) John Green, Chicago; (h) M. H. McGovern, Chicago:

Bids Received on Feb. 15 for Sanitary Sewer System at Rochelle, Ill.

Quantities.	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
4 Drop manholes	$60.00	$45.00	$40.00	$50.00	$43.00	$37.00	$40.00	$40.00
107 Manholes	50.00	36.50	33.50	35.00	35.00	30.00	30.00	35.00
34 Flush tanks	120.00	68.50	68.00	70.00	70.00	60.00	60.00	60.00
36,562 lin. ft. of 8-in. pipe	.75	.52	.67	.55	.68	.58	.57	.72
6,097 lin. ft. of 10-in. pipe	.82	.96	.95	.60	.81	.70	.75	.80
5,744 lin. ft. of 12-in. pipe	.90	1.42	.96	.65	.81	.71	.90	.84
5,483 lin. ft. of 15-in. pipe	1.00	1.62	1.03	.70	.95	.81	.95	1.00
1 Septic tank	3,100.00	2,963.25	4,000.00	2,600.00	3,400.00	3,000.00	3,100.00	3,500.00
Kyte Creek crossing	600.00	156.40	450.00	550.00	550.00	475.00	400.00	375.00
Total amount of bids	$56.344	$51,438	$51,957	$40.814	$49,939	$42,866	$44,702	$51,330

Rock excavation included in bid unless mentioned.
(a) All rock $2.75 per cu. yd.
(b) Loose rock extra $1 per cu. yd.; solid rock extra $3.50 per cu. yd.
(c) Loose rock 80 cts. per cu. yd.; solid rock $2 per cu. yd
(f) ¾-in galvanized iron water pipe 30 cts.; rock $2.25 per cu. yd.
(g) Rock $2.50 per cu. yd.

POWER PLANT.—Los Angeles, Cal.—The itemized bids received by W. H. Sanders and O. H. Ensign, Consult Engrs., and L. C. Hill, Supervising Engr., U. S. Reclamation Service, on Nov. 1, 1905, at Los Angeles, Cal., for the electrical apparatus for Roosevelt power plant, Salt River project, Arizona, are now announced as follows; (a) California Electrical Works, San Francisco, Cal (Western Electrical Apparatus, Chicago), f. o. b. Chicago, Ill.; (b) Westinghouse, Pittsburg, Pa.; (c) General Electric, Schenectady, N. Y.; (d) Crocker Wheeler, New York City; (e) Allis-Chalmers, Milwaukee, Wis.; (f) Hendrie Bolthoff, Denver, Colo.†; (g) Warren Electric, Sandusky, O.‡:

Bids in Detail Received for Electrical Apparatus for Roosevelt Power Plant, Arizona.

	*(a)	(b)	(c)	(d)	(e)	†(f)	‡(g)
One generator, item 1	$5,400.00	$6,600.00	$7,763.00	$7,280.00	$7,252.00	$8,030.00	$9,900.00
One exciter, item 2	1,485.00	1,950.00	1,658.00	1,788.00	1,720.00	1,595.00	2,000.00
One switchboard, item 3	887.00	860.00	834.00	1,130.00	801.00	1,092.00	2,100.00
Two generators, later delivery, item 4	10,800.00	13,200.00	13,977.00	14,560.00	14,504.00	16,050.00	19,000.00
One exciter, later delivery, item 5	1,485.00	1,950.00	1,658.00	1,788.00	1,720.00	1,595.00	2,000.00
Two generators, later delivery, item 6	5,400.00	6,600.00	6,631.00	7,280.00	6,710.00	8,030.00	10,000.00
Delivery of items 1, 2 and 3	6 months	6½ months	5½ months	210 days	6 months	5 months	....
One generator, shipping weight in pounds	43,700	50,000	37,500	40,000	68,000	....	55,000
One exciter, shipping weight in pounds	......	9,500	9,500	10,000	14,000	....	10,000
Freight rate (Governm't) to Roosevelt, Ariz., 100 lbs.	$2.08	$2.10	$2.10	$2.10	$2.05	$2.00	$2.10
	%	%	%	%	%	%	%
Efficiency generator 100% P. F., 125% load	95	..	..	..	..	95	95
Efficiency generator 100% P. F., full load	95	94	95	95	95	..	95.5
Efficiency generator 100% P. F., ¾ load	94	92.7	94	94	94	94	93
Efficiency generator 100% P. F., ½ load	91.5	90	92	92	92	92.5	91
Regulation of generator 100% P. F	8	8	8	8	8	7	6
Regulation of generator 90% P. F	..	14	15	16	16	15	11
Regulation of generator 85% P. F	19	..	18	..	..	..	11.5
Regulation of generator 80% P. F	..	18	22	18	21	20	12
Regulation of generator 70% P. F	25	20	28	20	24	23	13.5
Price, items 1, 2, and 3, f. o. b.	$7,772.00	$9,410.00	$10,255.00	$10,198.00	$9,773.00	$10,717.00	$14,000.00
Freight, items 1, 2 and 3	1,127.00	1,270.00	1,008.00	1,070.00	1,701.00	....	1,370.00
Cost, items 1, 2 and 3, delivered	8,900.00	10.680.00	11,263.00	11,268.00	11,474.00	....	15,370.00
Weight in pounds, items 1, 2 and 3	54,200	60.500	48,000	51,000	83,000	....	66,000
Price, items 1, 2, 3, 4 and 5, f. o. b.	$20,057.00	$24,560.00	$25,890.00	$26,546.00	$25,997.00	$28,374.00	$35,000.00
Freight, items 1, 2, 3, 4 and 5	3,145.00	3,570.00	2,783.00	2,960.00	4,779.00	....	3,870.00
Cost, items 1, 2, 3, 4 and 5, delivered	23,202.00	28,130.00	28,673.00	29,506.00	30,776.00	....	38,870.00
Weight in pounds, items 1, 2, 3, 4 and 5	151,000	170,000	132,500	141,000	233,000	....	186,000
Price, items 1, 2, 3, 4, 5 and 6 (2 generators) f. o. b.	$30,857.00	$37,760.00	$39,152.00	$41,106.00	$39,417.00	$44,432.00	$55,000.00
Freight, items 1, 2, 3, 4, 5 and 6 (2 generators)	4,963.00	5,690.00	4,358.00	4,640.00	7,568.00	....	6,200.00
Cost, items 1, 2, 3, 4, 5 and 6 (2 generators) deliv'r'd	35,820.00	43,450.00	43.510.00	45,746.00	46,985.00	....	61,200.00
Weight in lbs., items 1, 2, 3, 4, 5 and 6 (2 g'nerat'rs)	238,500	270,000	207,000	221,000	369,000	....	296,000

***Authorized signature on bid received Nov. 4, 1905. †Manufacturer not named. Weights not given. ‡No certified check with bid.**

*CANAL, DAM, ETC.—Boise, Idaho.—The bids in detail received by the U. S. Reclamation Service on Feb. 1 for first contracts for dam, canal, earthen embankments, etc., in connection with the Pakette-Boise Project, Idaho, are here given. A. J. Wiley and E. G. Hopson, Consult. Engrs.; D. W. Ross, Supervising Engr. The bidders were (a) Page & Brinton, Lake City, Utah (no dtail drawing submitted); (b) Monad Engineering Co., New York City (detail drawings not submitted on items 4, 5, 6); (c) New Jersey Foundry & Machinery Co., New York City; (d) United Iron Works, Oakland, Cal.; (e) Coldwell, Wilcox Co., Newburgh, N. Y.; (f) Chapman Valve Mfg. Co., Indian Orchard, Mass.; (g) Camden Iron Works, Camden, N. J.; (h) I. P. Morris Co., Philadelphia, Pa.:

BIDS RECEIVED BY U. S. RECLAMATION SERVICE FOR DAM, CANAL, EARTHEN EMBANKMENTS, ETC., AT BOISE, IDAHO.

	Quantity.	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
C.-i. gates and guides. 14 gates 5 x 9 ft.	70,000	$0.15	$0.08	$0.08¼	$0.06¾	$0.13	$0.07	$0.115	$0.15
C.-i. gates and guides, 8 gates and guides 5 x 6 ft.	32,000	.15	0.12	.11	.06¾	.13	.07	.12	.155
C.-i. gates and guides, 2 standard gates with lifting stems and ball-bearing pedestals for raising 80,000 lbs. (complete)	......	500.00	907.00 957.00	1,000.00 1,070.00	1,350.00	1,757.50	658.00	1,375.00	2,180.00
Lifting devices, 8 standard ball-bearing lifting devices for raising 20,000 lbs. (complete)	.....	400.00	244.00 273.00	280.00 310.00	240.00	184.50	201.00	385.00 430.00	500.00
Lifting devices, 6 standard ball-bearing lifting devices for raising 15,000 lbs. (complete)	......	400.00	232.00 262.00	270.00 290.00	190.00	174.50	192.00	320.00 360.00	500.00
Lifting devices, 8 standard ball-bearing screw lifting devices for lifting 30,000 lbs. (complete)	......	500.00	281.00 311.00	320.00 360.00	300.00	215.50	214.00	330.00 380.00	650.00
Total	......	$25,900	1 speed $16,846 2 speed $17.598	1 speed $17,715 2 speed $18,535	$15,045	$21,022	$12,928	1 speed $22,280 2 speed $23.280	$32,020

CONCRETE WORK.—Richmond, Ind.—Frederick R. Charles, City Engr., Richmond, Ind., sends us detail cost of concrete work done under his supervision; one contract was municipal work and the other four were railroad construction. The work was done by "force account."

COST OF CONCRETE.

	Miami River Bridge, Ohio.				Fernold, Ernst St. Viaduct, Cincinnati, Ohio.				Quebec Ave. Viaduct, Cincinnati, Ohio.				C. H. & D., B. & O. Viaduct, Cincinnati, Ohio.				Dam at Whitewater River' Richmond, Ind.			
	Quantity, used.	Price paid.	Total cost.	Cost per yd. of concrete in place.	Quantity used.	Price paid.	Total cost.	Cost per yd. of concrete in place.	Quantity used.	Price paid.	Total cost.	Cost per yd. of concrete in place.	Quantity used.	Price paid.	Total cost.	Cost per yd. of concrete in place.	Quantity used.	Price paid.	Total cost.	Cost per yd. of concrete in place.
Cement, bbls.	1,156	$2.10	$2,436.36	$1.58	376	$1.70	$639.00	$1.48	500	$1.60	$800.00	$1.40	1,908	$1.60	$3,052.80	$1.44	204	$1.60	$326.70	$1.48½
Sand, yds.	......	......	532.30	.35	224	1.20	278.40	.64	239	1.25	298.75	.53	1,105	.95	1,049.75	.50	Sand and Gravel			.80
Stone	......	......	1,165.00	.75	255	1.55	433.25	1.00	560	1.88	1,046.90	1.84	1,468	1.48	2,172.60	1.03	......	......	......	......
Lumber	......	......	981.71	.64	......	......	173.40	.40	......	......	220.70	.38	......	......	1,135.80	.54	......	......	......	.608
Tools—Hardware	......	......	307.18	.20	......	......	25.00	.06	....	......	30.44	.05	......	......	537.00	.25	......	......	......	.445
Water	......	......	......	......	......	......	......	......	......	......	......	......	......	......	50.00	.03	......	......	......	......
Total Material	......	.....	5,422.55	3.52	......	......	1,548.65	3.58	......	......	2,396.79	4.20	......	......	7,797.95	3.79	......	......	......	3.338
Clearing—Excavating	......	......	......	......	......	......	482.61	1.12	......	......	......	......	......	......	......	......	......	......	......	.96
Mixing & Placing Concrete	......	......	......	......	......	......	488.62	1.13	......	......	......	......	......	......	......	.....	Set. Forms & mix. Con.			1.007
Building Forms, etc	......	......	......	......	......	......	107.37	.25	......	......	......	......	......	......	....	......	......	......	......	......
Pumping	......	......	236.00	.15	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	.275
Total Labor, per day	......	1.75	4,287.86	2.78	......	1.75	1,082.20	2.50	......	1.75	1,686.00	2.96	......	1.75	7,274.67	3.44	......	1.50	......	2.242
Total Cost of Concrete, yd.	1,542	.....	9,710.41	6.30	434	......	2,630.85	6.08	570	......	4,082.79	7.16	2,111	......	15,272.62	7.23	220	......	1,227.60	5.58
All Concrete Hand-mixed...	One Abutment, Six River Piers, Put down with cofferdams. Sand and Stone close to site. Cement teamed ten miles.				Two Abutments at Street. Excavation Rock and Shale.				All Pedestals, 5′ x 5′ on top, and from 8′ to 20′ high. Location very inconvenient for delivery of materials. All team or wheelbarrow work.				One pier 56′ high. Concrete handled by steam derrick. Two Abutments, and remainder Pedestals. All materials teamed or wheeled.				Reinforced Concrete dam. Footings put in by aid of cofferdams and steam pump.			

WATER SUPPLY PLANT.—Georgetown, S. C.—Bids were opened on Feb. 23 for construction of a water-supply plant for the Atlantic Coast Lumber Corporation, and the contract was awarded to E. J. O'BEIRNE, of Atlanta, Ga., and JOHN J. CAIN, of Columbia, S. C., at $97,927. The bidders were; (a) E. J. O'Beirne & John J. Cain; (2) M. H. Kelly; (3) G. O. Tenney; (4) Guild & Co., Birmingham, Ala.; (5) T. McMaster. Charles C. Wilson, Consult. Engr. The itemized bids were as follows:

LIST OF BIDS RECEIVED ON FEB. 23, 1906, FOR WATER SUPPLY PLANT FOR ATLANTIC COAST LUMBER CORPORATION, GEORGETOWN, S. C.

		1		2		3		4		5	
Intake crib, timber, per 1,000 ft.	7,680 ft. B. M.	$40.00	....	$40.00	....	$40.00	....	$50.00	....	$6.00	For labor only
bolts	169 lbs.	.10	....	.05	....	.08	....	.05	....	No bid.	....
stone	50 cu. yds.	4.25	....	5.00	....	3.00	....	4.00	....	"	....
Tank foundation, excavation	100 "	.30	....	.30	....	.22	....	.60	....	.30	....
concrete	100 "	10.85	....	9.00	....	9.00	....	9.75	....	9.00	....
cap stones, lump price	....	....	....	......	....	......	......	......	$300.00	....	$150.00
Tank and tower, erected complete, lump price	....	....	....	......	....	......	....	......	6,500.00	....	4,500.00
Boiler and pump, foundation:											
excavation	23 cu. yds.	.30	....	.35	....	.30	....	.75	16.85	.30	6.90
concrete	21 "	10.85	....	10.00	....	9.80	....	10.50	241.50	8.50	178.50
Boilers, stack & heaters, furnished & set complete, lump price	....	....	$3,000	......	$2,470	......	$3,500	......	3,250.00	....	2,300.00
Boiler feed pump, set complete, lump price	....	....	200	......	300	......	175	......	175,00	....	125.00
Two 1,500,000 gal. Duplex pumps set up complete with all piping, lump price	....	....	3,150	......	4,100	......	3,750	......	2,990.00	....	2,100.00
Pump and boiler house complete, lump price	....	....	3,000	......	2,980	......	3,800	......	3,750.00	....	2.350.00
Laying 12-in. cast iron pipe and specials, complete furnishing all materials except pipe, specials and lead:											
2.5′ cover	5,000 ft.	.30	....	.30	....	.38	....	.37½	....	.26	Add $1.00 per ton to 4½ miles and 15 cents for each stump.
2 ′ cover	500 "	.30	....	.25⅛	....	.36	....	.35	....	.24	
1 ′ cover	64,600 "	.30	....	.25	....	.34	....	.32	....	.22	
In water, 5 to 2′.0	6,000 "	.30	....	.45	....	.60	....	.50	....	1.00	
In water, over 20′	1,500 "	.30	....	.50	....	1.20	....	1.50	....	.60	
Laying 20″ pipe and specials	700 "	.50	....	.60	....	1.48	....	1.40	....	.80	
Foot valves and strainers 12″	2	30.00	....	43.00	....	38.00	....	50.00	....	40.00	
Check valves 12″	3	60.00	....	45.00	....	75.00	....	50.00	....	50.00	
Gate valves 12″	18	40.00	....	47.00	....	38.00	....	50.00	....	17.50	
Gate valves 20″	8	135.20	....	146.00	....	155.00	....	150.00	....	165.00	
Timber for pipe foundations	2,000 ft. B. M.	20.00	....	40.00	....	18.00	....	19.00	....	8.00	Labor only.
Concrete for pipe foundations, probably none	....	12.00	....	7.00	....	10.00	....	12.50	....	10.00	
Reservoirs and filters, excavation	7,000 cu. yds.	.25	....	.26	....	.22	....	.50	....	.35	
concrete	8,800 "	10.85	....	14.00	....	12.20	....	15.00	....	13,00	
reinforcing steel	30,800 lbs.	.02½	....	.02¾	....	.02¼	....	.03¾	....	.01	Labor only.
Brickwork, 53,000	....	18.00	....	15.00	....	18.00	....	20.00	....	15.00	
6″ tile drain	2,400 ft.	.08¾	....	.11	....	.30	....	.15	....	.20	
stone, 2″-6″	350 cu. yds.	3.35	....	3.00	....	2.80	....	3.60	....	No bid.	
stone, 1″-2″	180 "	3.35	....	3.50	....	3.10	....	3.50	....	"	
stone, ⅜″-¾″	180 "	3.35	....	4.00	....	3.40	....	3.50	....	"	
sand	1,400 "	.75	....	1.80	....	1.50	....	1.00	....	"	
6″ perforated pipe	900 lin. ft.	1.00	....	.16	....	1.10	....	1.00	....	"	
Totals			$97,927		$110,699		$112,123		$128,581		

Pipe	900 tons, c.-i.	$27.35	Dimmick Pipe Co., Birmingham, Ala., total	24,615
Pipe	2,000 " "	27.25	U. S. Cast Iron Pipe & Foundry Co., 80 Broadway, New York City, total	54,500
Specials	7 " "	55.00	U. S. Cast Iron P. & F. Co., total	385
Lead	136,000 lbs.	5.80	Colorado Supply Co., total	7,888
Grand Total				$185,315

Add for tank and tower in Georgetown.

FOREIGN CONTRACTS.

(To insure prompt attention, letters upon consular business should be addressed to the American Consul at ———, ———. Such letters are opened and attended to by the person who happens to be in charge of the office. If addressed to the consul by name they are forwarded to him unopened if he should be absent, and a delay thus intervenes; if he should in the meantime have gone out of office they may wholly escape attention.)

BRIDGE CONSTRUCTION.—Portugal.—Bids will be received on April 7, at the Ministry of Public Works, Lisbon, for the construction of a metal bridge over the River Mondego, at Martyr Santo.

BREAKWATER.—Spain.—Bids will be received on April 7 by the Directorate General of Public Works, Madrid, for the construction of a breakwater at the port of Arrecife, Island of Lanzarote, Canaries, at the estimated cost of 927,191 pesetas (or about $180,000). A deposit of 9,271 pesetas ($1,500) is required to qualify any bid.

STONE-CRUSHING PLANT. — Tonquin, French China.—We are informed by Thomas W. Clarke, Engr. and Asst. Supt. of Construction, Standard Oil Co., Hong Kong, China, that P. Ducleux, of Hai-Fong, Tonquin, China, is in the market for a modern complete plant to crush stone. "If any American firms would like to bid it will be necessary for them to bear in mind the following facts: That when they send the information it must be complete, as it takes a long time to carry on a correspondence, and the English, German and French firms who are on the spot will get the order. The catalogues should be supplemented with the following information: capacities of machines, actual weight in place, space required, power required, time of delivery (this should be estimated right, and with the idea of delivery at about that time, not made with the object of getting the order, and not living up to the agreed time afterwards, as the English, German and French firms live up to their agreements, and make a point of deliveries at times agreed); cost aboard ship at Hai-Fong. The other bidders give the price delivered. Mr. Ducleux is a large contractor and engineer in Hai-Fong, and I believe a reputable man. If I can help any of the firms who wish to bid on this work, don't let them hesitate to write me, as I am desirous of the Americans getting a part of the trade out here; but they must remember that price talks out here, and you cannot compete with the foreign firms unless you get down to bed rock."

CONCRETE STEEL CONSTRUCTION, ETC.—Sydney, Australia.—We are informed that the question of concrete piles and concrete steel construction for piers and wharves at Port Melbourne is being considered. The work will not be definitely undertaken probably for some time, which should give Americans an opportunity to submit propositions. The work, we are informed, probably will be done by contract, and ability to carry out the work rather than patent rights will be the determining factor in securing business. Contracts will be let very likely to local firms, but American firms having special systems for concrete-steel pier work would do well to introduce them now, so that they would be in a position to push the matter later when the project is in a more advanced condition. Mr. Swinburne, Victorian Minister of Agriculture, and a member of the Investigating Commission, Sydney, should be addressed.

ORE MILL.—Nicaragua.—We are advised by J. Francis Le Baron, Consult. Engr., La Luz y Los Angeles Mining Co., Bluefields, Nic., that plans and estimates are being prepared by him for the installation of a 2,000-ton per day stamp and ore mill (gold), with complete cyanide plant, for the La Luz and Los Angeles mines; also plans for a 1,800-HP. hydro-electric power plant to operate the mill. He is in the market for catalogues and for the following equipment: 5,000 ft. aerial wire tramways, gold dredges, electric drills, crushing machinery, cyanide plant, electric or steam shovels, stamp mills, turbines, ore mill equipment, and hydro-electric power plant equipment. Address Mr. Le Baron at Bluefields, Nicaragua, C. A., c|o Senor Don Adalfo Diaz, La Luz y Los Angeles Mines.

DAM.—Egypt.—It is reported that the Egyptian government has decided on the construction of a new dam on the River Nile, near the village of Esneb, about 100 miles from Assouan, where the great dam was recently constructed. The expense of the new undertaking is calculated at $11,000,000.

The contract will be assumed by the firm of Aird & Co., which constructed the Assouan dam. It is expected that when the work is completed each side of the river for a distance of about 240 miles will enjoy a system of irrigation, so that the raising of a cotton crop will be easily established.

ENGINEERING CONDITIONS IN PERU.

Lima, Peru, March 7, 1906.

Editor: At the present time there is considerable railroad work in prospect in South America. The Peruvian Government is negotiating a loan of £3,000,000 ($14,580,000) with the German-Transatlantique Banco. If the loan is made it is understood that Speyer Bros., of London, get 25%; a percentage is subscribed by a French banking house. There is great opposition to the loan as the people do not want the government to go into debt, but if the loan is made and the money expended in an intelligent manner by engineers appointed by the bond holders, it will be an excellent thing for the country. The Peruvian Corporation, Ltd., of Lima, is to rebuild several miles of the Pacasinayo Ry. Some reconstruction of the line in Lima is contemplated. The Bajada Electric Ry., extending from Alto La Paz to La Paz, is in operation now; considerable of this line is on a 7% grade, overcoming a difference in elevation of 1,500 ft. in total length of line. The Peruvian Corporation is building a 900-ton steamer to operate on Lake Titicaca, between Puno and Guaqui, as the two small steamers in use at present cannot handle the business. Several companies have been organized in Peru to develop irrigation projects. The Antofagasta Ry. Co. is building two or three short branch lines to the saltpeter and tin mines. This company also has been making surveys in southern Bolivia with a view to building a branch to Potosi. There are several short lines projected in Chili, and bids have been opened for the building of the Arica-La Paz Ry. In Bolivia the government has in view the construction of 800 miles of railway, but from a personal knowledge of the situation, would suggest that this project is not considered a conservative investment.

I would like to say a word about engineers coming here. If one is experienced, can stand "roughing it," is willing to study the language and can make up his mind to stay in the country it is all right to come; otherwise it is a waste of time, money and not fair to the people who pay $400 or $500 gold to bring a man to this section of the continent. But an engineer coming here should have an iron-clad contract for at least one year's work, all expenses paid from the time he leaves the United States until he returns, otherwise he actually loses money by coming here. An engineer in the United States, who has a family, is much better off when earning $125 or $150 and expenses than a man here at $300 and expenses, as it will cost for a family of two here from $200 to $250 to live respectably; or for two persons boarding in a family hotel, it will cost about $125 gold. Then the extras and extremely high price for the necessities of life run the cost up so there is nothng left (and that doesn't take into consideration that it costs a man $250 gold or more to bring his wife here and the same cost for return trip to the United States). Very truly, Engineer.

CIVIL SERVICE EXAMINATIONS

APPRENTICE, MINT AND ASSAY SERVICE.—Washington, D. C.—The U. S. Civil Service Commission announces an examination on April 25 for position of apprentice in the Mint and Assay Service, at Philadelphia, New Orleans, Denver and San Francisco, as vacancies may occur. Applicants should apply for form 304 and special form. Age limit, 18 to 24 years, inclusive. Applications will not be accepted from other than graduates in metallurgy or mechanical engineering, and in chemistry from recognized technical schools of recognized standing. Each applicant must file a properly certified statement as to the length of time spent in college, the studies pursued, the standing in those studies, and other special qualifications he has for such work, with a thesis upon some topic relating to metallurgy, mechanical engineering, or chemistry. The length of time any apprentice may serve in this capacity in the Department is limited to three years. On the completion of his term of service as apprentice the employee shall be eligible for appointment to any position in the operating department in which his term of service as apprentice has been served.

ASSISTANT ELECTRICAL ENGINEER.—California.—An examination will be held on May 3-4 by the U. S. Civil Service Commission to fill a vacancy in position of assistant electrical engineer, Signal Service at Large, for duty in the Department of California, at $1,400 a year. Age limit, 20 years or over on date of examination. Applicants must indicate in their applications that they have a good general knowledge of electrical science, and that they are thoroughly familiar with telephone, telegraph and cable engineering. Application form 1312.

ENGINEER DRAFTSMAN.—Wheeling, W. Va.—The U. S. Civil Service Commission announces an examination on May 2-3-4, to fill a vacancy in the position of structural and mechanical draftsman, at $1,320 a year, in the Engineer Department at Large, Wheeling, W. Va.; and vacancies as they may occur in any branch of the service requiring similar qualifications. As the Commission has experienced considerable difficulty in securing eligibles for this position, qualified persons are urged to enter this examination. Age limit, 20 years. Application form 1312.

ELECTRICAL ASSISTANT.—Washington, D. C.—An examination will be held on May 2 by the U. S. Civil Service Commission to fill six vacancies in the position of electrical assistant, at $900 a year each, in the Signal Service at Large. As the Commission has experienced considerable difficulty in securing eligibles for this position, qualified persons are urged to enter this examination. Application form 1312.

CONSULTING BRIDGE ENGINEER.

CONSULTING ENGINEER.—Pine Bluff, Ark.—A competent and experienced consulting engineer is needed by Jefferson County for the work of making soundings, locating a combination railroad and highway bridge over the Arkansas River at Pine Bluff, drawing plans and specifications if deemed feasible, and superintending construction, etc. Applicants will correspond at once with E. J. Kerwin, Chn., Board Comrs., Highway Bridge, Pine Bluff. (Advertised, Engineering News.)

COAST ARTILLERY, U. S. A.

MASTER ELECTRICIANS.—Fort Totten, N. Y.—Wanted: Master Electricians for Coast Artillery, U. S. Army. Graduate of standard schools of technology or others of equivalent theoretical education, and three years' practical experience with steam and electricity, under 33 years of age and unmarried. Pay and allowances, as follows: Pay, $75 per month. Allowances, house, food, clothing, fuel, light, medical attendance, etc. After 30 years' service, retirement on three-quarters pay and allowances. Apply to Secretary, School of Submarine Defense, Fort Totten. (Advertised, Engineering News.)

INDUSTRIAL NOTES.

DODGE & DAY, Engineers, have removed their offices to suite 597 Drexel Bldg., Philadelphia.

THE ABBOTT-GAMBLE CO., New York and St. Louis, have been awarded the contract for installing fire alarm conduits at Scranton, Pa.

MR. HENRY A. HICKOK, M. E., Consult. and Contracting Engineer, has removed his office from 762 Broad St. to the new Union Bldg., 9-15 Clinton St., Newark, N. J.

THE DAYTON PNUEUMATIC TOOL CO., Dayton, O., has opened branch offices at 707 and 708 Lincoln Trust Building, St. Louis, Mo., with Mr. J. A. Prescott, Southwestern Manager, in charge.

THE HOLLY CONSTRUCTION CO., with headquarters at Holly, Colo., has opened a permanent N. Y. office, No. 5 Nassau St. It is at present building a 1,200-ton beet sugar refinery at Swink, Colo.

THE RICKETTS ENGINEERING CO. has been incorporated by Murray C. Ricketts, Charles M. Ricketts and George C. Shinn, to carry on the business of general contractors' agents. The capital stock is $15,000.

THE LIMA LOCO. & MACHINE CO., Lima, O., reports that Kaul & Hall Lumber Co., Pa., has placed an order for one 65-ton Shay locomotive. Geo. Cousin, La., has placed an order for one 20-ton Shay locomotive.

McALLASTER & BENNETT, Consulting and Constructing Engineers and Naval Architects, office 503-504 Pioneer Bldg., Seattle, have been formed by Mr. E. L. McAllaster and Mr. Samuel Bennett.

THE BELMONT IRON WORKS, Philadelphia, announces the removal of its N. Y. office to 1825 Park Row Bldg., with Mr. L. A. Dietz Engineer in charge. Mr. W. B. Reed is no longer connected with the company.

PAWLING & HARNISCHFEGER, with works at Milwaukee, Wis., for building electric traveling cranes and hoists have established an office at No. 45 Broadway, N. Y. Mr. Wm. F. Brewster has been appointed manager.

WEISKOPF & STERN is the name of a new copartnership of consulting engineers formed by Mr. S. C. Weiskopf and Mr. Eugene W. Stern, who have removed their offices to 68 William St. For a number of years both members of the firm have specialized in steel building construction and foundations.

THE H. W. JOHNS-MANVILLE CO., N. Y., through its Chicago branch, has just completed a contract for the installation of fire felt pipe and boiler covering in the new plant of Sears, Roebuck & Co., of Chicago. This covering is fireproof, elastic, light in weight, and unaffected by expansion or contraction of pipes.

THE INTERNATIONAL EXPOSITION OF TOURCOING, France, will take place between May 1 and Sept. 1, 1906. There will be on exhibition the latest developments in electrical machinery, mechanical works, tools, etc. The special commissioner for the American section is H. G. Bayer, 47 Barclay St., New York.

JOHN F. ALLEN, 370-372 Gerard Ave., New York, manufacturer of portable pneumatic riveting machines, reports a steady demand for the "Allen" riveters. Chris Cunningham, Greenpoint, Brooklyn, and also Geo. Focht Sons, Hoboken, have recently installed Allen boiler riveters, the former a 73-in. reach and the latter a 96-in. reach.

THE KENNEDY VALVE MFG. CO., New York, has received an order for the valves for the high pressure water mains to be immediately installed in New York City under the direction of the Dept. of Water Supply, Gas & Electricity. There will be between 2,000 and 3,000 of these valves, the largest size of which is 20 ins., and will take about 100 carloads to transport the order.

KILPATRICK BROS. & COLLINS, Omaha, Neb., have placed an order for one 45-ton Shay locomotive for use on a cut-off of the Union Pacific west of Omaha. Nitrate Ry. Co., Iquique, Chile, has placed an order for an 80-ton Shay locomotive. State Ry. of Chile has placed an order for one 15 × 22 Mogul locomotive. Syndicato de Orbas Pulicas, Chile, has placed an order for two 12 × 18 Mogul locomotives.

THE RAIL JOINT CO., N. Y., has closed contracts for the enlargement and new equipment of the works at Troy, N. Y. These improvements will enable it to double the output of previous years. The works are now running day and night, while the improvements are in progress, to keep pace with the growing demands from steam and electric railroads for the three types of base supported rail joints known to the trade as the Continuous, Weber and Wolhaupter types for tee and girder rail sections.

THE DOMINION COPPER CO., of Boundary Falls, B. C., has just placed an order with the Traylor Engineering Co., of N. Y., for a copper matting furnace. The furnace will measure 48 ins. × 204 ins. inside the jackets at the tuyere line. The water jackets will be of steel, flanged and riveted, with no seams or rivets exposed to the fire. They will be arranged in two tiers, one above the other. The furnace will be entirely self-contained. It will have a capacity of 350 to 400 tons a day. The Traylor Engineering Co. will also furnish a blower to go with the furnace.

THE RAYMOND CONCRETE PILE CO., Chicago, has just completed the placing of about 625 20-ft. concrete piles for a foundation for a reinforced concrete building for the Gulf Bag Co., at New Orleans, W. H. Lester, Engineer. This is the first instance in which concrete piles have been used in New Orleans and has created much interest for the reason that the large, tapering concrete piles but 20 ft. in length were used in soft ground to carry weights where 50-ft. wooden piles have been used heretofore. The Raymond Concrete Pile Co. has just been awarded the contract for placing 20-ft. concrete piles in foundation for a mill building for the H. T. Lawler Milling & Trading Co., New Orleans, MacKenzie & Goldstein, Architects.

THE RUSSEL WHEEL & FOUNDRY CO., Detroit, Mich., manufacturing cars, car trucks and railway supplies, informs us that it is now completing a new foundry building, 150 × 370 ft., with three cupolas and a capacity of about 75 tons of iron per day; equipped with one 10-ton and one 20-ton crane, electric elevator, etc. It has also completed an addition to the structural shop, 90 × 135 ft. By utilizing the space occupied by the old foundry, it will practically double the capacity of the car shops, machine shops and blacksmith shops. The company has installed additional power plant, aggregating 350 HP. capacity, and has purchased and nearly completed the installation of all new machinery required for the above extension. Electricity and compressed air are used principally in operating machinery and tools.

THE WESTINGHOUSE MACHINE CO., East Pittsburg, during the month of January, entered orders for 22 steam turbines aggregating 56,500 brake-HP. in rated capacity, or an average of over 2,500 B. HP. per turbine. Some of the largest orders were received from the United Electric Light & Power Co., New York, 15,000 KW.; N. Y., N. H. & H. R. R. Co., New York, 11,250 KW.; Louisville (Ky.) Lighting Co., 3,000 KW.; Oliver Iron & Steel Co., Pittsburg, 1,000 KW.; W. Va. Pulp & Paper Co., New York, 1,200 KW., and the Wash., Alex. & Mt. Vernon Ry., 1,000 KW. The largest machines go to the United Elec. L. & P. Co., and will be 7,500 KW., or 11,000 B. HP. rated capacity. Two of these units have already been sold to the company, which is affiliated with the N. Y. Edison interests. A 3,000-KW. turbine-unit goes to Louisville, and three 4,500 B. HP. units to the N. Y., N. H. & H. R. R.

THE WESTINGHOUSE ELECTRIC & MFG. CO., E. Pittsburg, has received within the last few days some extensive orders for electric railroad machinery. The Metropolitan West Side Elevated Ry. Co., of Chicago, which is making important additions to its rolling stock, has ordered an equipment of 100 160-HP. motors and 50 equipments of unit switch control. The same company ordered 52 motors of the same type only a month ago. The Bluffton & Marion Construction Co., of Bluffton, Ind., has contracted for a complete installation of electrical apparatus for a power house to operate an entire railroad, along with 32 50-HP. motors. The Denver City Tramway Co. has ordered 60 No. 101-F railway motors and the Pacific Electric Co. has ordered 80 75-HP. motors for an electric railway in Los Angeles, Cal., but the largest order came from the Public Service Corporation of New Jersey, which amounted to 378 motors, varying in capacity from 40 to 75 HP. These will be used to equip a number of new cars on the surface lines outside of Camden.

THE SCHERZEL ROLLING-LIFT BRIDGE CO., Monadnock Block, Chicago, reports progress on several of its bridges as follows: On the New York, New Haven & Hartford Ry. two double-track bridges (forming a four-track structure) at Westport have been put in service, and similar structures at Cos Cob and the Housatonic River are approaching completion, while another over the Neponset River has been commenced. The substructure is nearly ready for the long-span double-track bascule bridge over the Connecticut River. Plans have been prepared for two six-track bridges over the Bronx River and Eastchester Bay. The Baltimore & Ohio Ry. is building a 230-ft. single-track bridge near the mouth of the Cuyahoga River at Cleveland, O., and will build a 160-ft. double-track bridge in that city. The bridges for the Fishguard & Rosslare Ry., in Ireland, and the Southeastern & Chatham Ry., in England, have been completed; two are now under construction for the Dutch Ry., in Holland, and the Buenos Aires Great Southern Ry., in the Argentine Republic.

BUSINESS OPPORTUNITIES IN SOUTH AFRICA.—Mr. Ernest Petersen, late Acting Consul-General of the Argentine Republic for British South Africa, wishes to act as agent in South Africa for manufacturers of cranes, derricks, hoisting and conveying machinery, doors and shutters, freight and passenger elevators, machine tools, drills, crushers and breakers, fireproofing materials, pipes, wheelbarrows, wire rope, railway guards, fences, sheet iron and metal works. Mr. Petersen is a graduated civil engineer and well known engineering contractor, and has been in Africa for seve years and is in complete touch with oppor es for American trade, both in Trans Cape Colony and Natal. He has the v ghest of references and testimonials payment for each and every order wil very case be guaranteed by bank or cas inst shipping documents. His permanen ress in South Africa is South African As ion, 6 Church Square, Cape Town, but h at present is the United States, and cat s and letters giving proposed terms and cements may be addressed to him at 37 ington Ave., New York City.

THE HAWORTH STON BUILDING COMPANY, of Haworth, J., has recently contracted to d an entire concrete village, in g a clubhouse and about 50 bunga The officers of this company are co d with the Franklin Society of N. Y. e structures will be built of concrete bl made on the Hayden concrete block ma which has just been bought from th ayden Automatic & Equipment Co., of ortlandt St., N. Y. The architect is F obbins, Jr., who is connected with the klin Society. Alex. Graham, of Ottawa, has contracted to build a large G ment building in Ottawa entirely of rete. Mr. Graham has placed his or for concrete machines with the Hayd utomatic & Equipment Co. The Que Co. Cement Concrete Const. Co. has ntly undertaken to improve the real es in Richmond Hill, L. I., N. Y., by erect on its property a number of concrete k dwellings. Martin Schimand, who has h xperience in contracting and building, has ntly bought from the Hayden Automati Equipment Co. a block machine. It is th rpose of the company not only to erect i n buildings with blocks made on this m ine, but to sell concrete blocks which it kes.

THE POWER & MINING MACHINERY CO., Milwaukee, reports that in order to better handle its business from the Rocky Mountain district, it has opened an office at 312 17th St., Denver. This new office is in charge of Henry F. Jurs as District Manager, who will give his attention to all inquiries coming from Colorado, Wyoming and New Mexico. Mr. Jurs was recently connected with the A. Leschen & Sons Rope Co., St. Louis, as their Western Manager in Denver. Mr. Jurs began his career as a machinist, working his way up through the drafting room. He then entered the service of the Union Iron Works, San Francisco, Cal. He left the Union Iron Works to take a position with the Baker & Hamilton Co., San Francisco, in charge of their steam engine and boiler department, and later was made manager of the shops located at Benicia, Cal. The Power & Mining Machinery Co. has recently completed the shipment of a No. 9 McCully Rock and Ore Breaker to the General Crushed Stone Co. for the plant at Rock Hill, Pa. In addition to the No. 9 McCully Breaker, above mentioned, the Power & Mining Machinery Co. is also building for the same concern, for use in the plant at North Leroy, N. Y., a No. 10 McCully breaker, which is one of the two largest rock and ore breakers ever built, the first one having but recently been shipped to the Little Falls (N. Y.) Stone Co.

THE FOUNDATION CO., New York, has received contracts as follows: The contract for the foundations of the Royal Queen Insurance Co. building, corner Maiden Lane and William St., N. Y. This work includes the sinking of 17 pneumatic caissons. The contract for the foundations of Nos. 37-39-41 Wall St., N. Y., the new building for the Trust Co. of Am. This contract will include a large number of caissons sunk by the pneumatic method, and involves the holding up of the heavy Mills Building during the course of construction. On March 17 the last caisson was sunk for the department store building to be erected by the John G. Myers Co. at Albany. These foundations, consisting of 37 caissons, were put down by the pneumatic process. This is the first piece of work of this nature which has ever been done outside of N. Y. City. While the building is only a six-story one, the John G. Myers Co. decided to take no chances with the treacherous soil on which Albany is built, as this company suffered a serious loss through the collapse of its building a year ago, due to faulty construction in the foundation work, whereby 13 lives were lost and 50 people seriously injured. The Foundation Co. has also received the contract for the foundations for the Municipal Lodging House at 25th St. and First Ave., N. Y. The foundations for this building consist of concrete piles, which are being driven according to the Simplex method.

THE TRAYLOR ENGINEERING CO., INC., New York, reports that Mr. Chas. C. Knauss, who has been Manager of the Allentown Foundry & Machine Works, Allentown, Pa., since 1900, has resigned in order to accept a similar position with the Traylor Mfg. & Construction Co., whose new works for the production of mining, milling, concentrating, reducing and crushing machinery in Allentown are just being completed. Mr. Knauss is a native of Bethlehem, Pa. After leaving school he served a full apprenticeship in machine shop, foundry and pattern-making shops. He spent the three years from 1896 to 1900 in the employ of the Bethlehem Steel Co., where he had charge of the general laying out of work and progressing it through the large No. 2 machine shop. He founded the Bethlehem Foundry & Machine Co., and is still a director of that company. When he took charge of the Allentown Foundry & Machine Works, it employed only 75 men and its output was only about six tons a day. The work consisted of machinery for making powder, machine castings, locomotive cylinders, sugar making machinery, and general machine shop work. This capacity was steadily increased under Mr. Knauss' management until now the works employ 300 men and have an output of from 50 to 60 tons daily. In his new position Mr. Knauss will find himself in control of works with new tools, etc., for the production of the machinery designed and sold by the Traylor Engineering Co. of New

Engineering News Book Department

Bridge Design and Construction

AMERICAN RAILROAD BRIDGES. By Theodore Cooper, C. E.
Cloth; 7 x 9½ ins.; 60 pages; 7 Tables; 26 Plates $2.00

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Cloth; 6 x 9 ins.; 88 pages; 76 Illustrations...........$2.00

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Reference Books

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Paper; 4½ x 7½ ins.; 20 pages; 16 Plates of Diagrams..$0.50

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Third Edition (1906); Flex. Morocco; 4½ x 7 ins.; 324 pages $3.00

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Cloth; 5 x 7 ins.; 48 pages $1.00

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Flex. Morocco; obl., 5¾ x 3½ ins. $2.00

Railroad Engineering

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Cloth; 6 x 8½ ins.; 980 pages; 312 Illustrations $5.00

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Cloth; 6 x 9 ins.; 260 pages; 43 Illustrations and 7 Folding Plates $3.00

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Cloth; 6 x 9 ins.; 40 pages; Illustrated; Second Edition, Enlarged (1906) $1.00

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Cloth; 6 x 9 ins.; 196 pages; Illus.; Second Edition, Revised $2.00

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DESIGN OF STEEL MILL BUILDINGS. By Prof. Milo S. Ketchum.
Cloth; 6 x 9 ins.; 380 pages; 29 Tables and 185 Illus.....$4.00

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Cloth; 6 x 9 ins.; 166 pages; 51 Diagrams; 35 Tables....$2.00

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HYDROGRAPHIC SURVEYING. By Samuel H Lea.
Cloth; 6 x 9 ins.; 200 pages; Illustrated $2.00

PLAT AND PROFILE BOOK. By H. F. Dunham.
Flex. Leather; obl., 4 x 9 ins.; 28 pages, profile Paper..$1.00

SURVEYING MANUAL. By Profs. W. D. Pence and Milo S. Ketchum.
Flex. Leather; 4½ x 6½ ins.; 250 pages; Illustrated....$2.00

Tunneling

MODERN TUNNEL PRACTICE. By David McN. Stauffer.
Cloth; 6¼ x 9½ ins.; 314 pages; 135 Illus.; (1906) $5.00

Full details of any of these books and other publications of the Engineering News Publishing Co. will be sent on request; also information regarding any books of a technical or general nature published by other houses.

Book Department

Engineering News Publishing Company

220 Broadway, New York

York, who control the entire output of the works. This is the only works in the east where a complete line of mining and milling machinery is produced, and the company has recently added to this a full line of cement making machinery.

THE GREER FILTER CO., of Philadelphia, has just closed a very satisfactory year's business, and has orders on its books which will carry it far into 1907. The following work has been completed: City of Carrolton, Ga., 500,000 gals.; H. B. Smith Machine Co., Smithville, N. J., 75,000 gals.; D., L. & W. R. R. Co., Mt. Morris, N. Y., 350,000 gals.; D., L. & W. R. R. Co., Alexander, N. Y., 350,000 gals.; Walton (N. Y.) Water-Works, 400,000 gals.; Columbian Rope Co., Auburn, N. Y., 60,000 gals.; Hamburg (N. Y.) Water & Electric Light Co., 250,000 gals.; Nashua River Paper Co., E. Pepperel, Mass., 300,000 gals.; Am. Sugar Refining Co., New Orleans, 100,000 gals.; Spring Brook Water Supply Co., Wilkes Barre, 3,500,000 gals.; City of Monroe, Ga., 500,000 gals.; Elizabeth (N. C.) City Water & Power Co., 500,000 gals.; Chester B. Derr, Wilkes Barre, 10,000 gals.; Benwood Water Co., Benwood, W. Va., 1,000,000 gals.; W. H. King, Easton, 4,000 gals.; Coder & Miller, Harrisburg, Pa., extension to the municipal filtration plant, 2,000,000 gals.; Hudson (N. Y.) Portland Cement Co., 250,000 gals. The same company has the following work under construction: Westwater & Casey, Columbus, 30,000,000 gals. for the city of Columbus; Kirchner Construction Co., Cincinnati, 112,000,000 gals. for the city; City of Independence, Kan., 1,500,000 gals.; City of Bellaire, 4,000,000 gals. It is also building for the City of Columbus, S. C., a 6,500,000-gal. plant.

THE POWER & MINING MACHINERY CO., Cudahy, Wis. (suburb of Milwaukee), has recently closed a contract for a complete rock crushing plant to be erected for the Little Falls Stone Co., Little Falls, N. Y. One feature in connection with the equipping of this plant that will be of more than usual interest, will be the size of the main crusher, a No. 10 McCully. To form an idea of the size of this crusher it is only necessary to state that its weight will be nearly 200,000 lbs. and its capacity, under favorable conritions, 700 tons of crushed stone per hour, or 7,000 tons per every working day of ten hours. Among the principal auxiliary machinery to be installed in this plant may be mentioned, four No. 6 McCully crushers for crushing the rejections from the No. 10 crusher; one No. 10 elevator 60 ft. long; one No. 9 elevator 67 ft. long; two 60-in. × 15-ft. rejection screens, and two 60-in. × 35-ft. sizing screens of special design. The product from this plant will be used for ballast, railroad and concrete work. All of the dust or fine material accruing from the crushing of the stone is to be used for making cement bricks, the manufacture of which will be carried on in a near-by plant owned and operated by the same company. This plant will be located on what is known as the "Finck Farm," about one mile from Little Falls, on the N. Y. S. & B. Ry. Mr. H. A. Shaper, formerly manager of the Mohawk Valley Stone Co., is the General Manager of this new enterprise.

THE AUSTIN MFG. CO., Chicago, reports sales of crushers as follows: Atchison (Kans.) Crushed Stone Co., No. 4 Crushing Plant; Adam Groth & Co., Joliet, No. 7½ and No. 5 Crushing Plant; Alfred Wenberg, Joliet, No. 4 Crushing Plant; O. P. Turley, Orleans, Ind., No. 4 Crushing Plant; Booth, MacDonald & Co., Christchurch, N. Z., two No. 3 Crushing Plants; Linwood Quarries Co., Davenport, Ia., No. 4 Crushing Plant; MacArthur Bros. Co., Chicago, No. 6 and No. 3 Crushing Plants; Mike Elmore, Cherry Run, W. Va., No. 6 Crushing Plant; John Gunn & Sons, Winnipeg, Man., No. 7½ Crushing Plant; Loy Pogue & Shafer, Findlay, O., No. 6 and No. 4 Crushing Plants; Marion Blue, Linden, O., No. 3 Crushing Plant; Wm. P. Carmichael, Williamsport, Ind., No. 5 Crushing Plant; Am. Trading Co., for Havana, Cuba, No. 2 Crushing Plant; P. S. Boxley & Co., Gladys, Va., No. 3 Crushing Plant; Henry J. Faudel, Independence, O., No. 2 Crusher; Beaver & Fillion, Bedford, Ind., No. 3 Crushing Plant; Silica Brick & Sand Co., Bluefield, W. Va., No. 5 Crushing Plant; Jacob Lauer, St. Paul, Minn., No. 7½ Crushing Plant; F. W. Menke Stone & Lime Co., Quincy, No. 2 Crushing Plant; Henshaw, Bulkley & Co., for H. I., three No. 3 Crushing Plants; Sage Bridge Co., Rochester, N. Y., No. 2 Crushing Plant; John McIntosh, Granite, Va., No. 3 Crusher; Atikokan Iron Co., Port Arthur, Ont., No. 6 Crushing Plant; Queenston Quarry Co., Queenston, Ont., No. 5 Crusher; Menlo Rock Crushing Co., Redwood City, Cal., No. 2 and No. 4 Crushing Plant; Bambrick Bros. Const. Co., St. Louis, No. 4 Crushing Plant; New York & St. Louis M. & M. Co., St. Louis, No. 5 Crushing Plant; J. J. Gehlen, Le Mars, Ia., No. 5 Crushing Plant; J. Henry Brown, Richmond, Va., No. 4 Crushing Plant; John A. Sinclair, Sulphur Springs, Tex., No. 6 and No. 4 Crushing Plants.

THE HARBISON-WALKER REFRACTORIES CO., Pittsburg, manufacturer of fire clay, silica, chrome, magnesite brick, importer and shipper of grain magnesite, magnesite cement, chrome ore, etc., reports that during the past two months it received the following orders and contracts: Bethlehem Steel Co., South Bethlehem, orders for all refractory materials required for new open-hearth furnace construction and two new blast furnaces, eight new stoves, connections, etc.; N. J. Zinc Co., Palmerton, all fire brick required for new blast furnace and four stoves, connections, etc.; Milliken Bros., Mariner's Harbor, S. I., N. Y., entire requirements of refractory material for five new basic open-hearth furnaces, soaking pits, heating furnaces, gas producers, etc.; N. Y. State Steel Co., Buffalo, entire requirements of refractory materials for two 200-ton "Talbot" furnaces with accompanying soaking pits, gas producers, boiler settings, etc.; Colonial Iron Co., Riddlesburg, Pa., complete blast furnace lining; Dunbar (Pa.) Furnace Co., complete furnace lining and all brick required for one new stove; Central Iron & Steel Co., Harrisburg, complete lining for blast furnace; Colo. Fuel & Iron Co., Pueblo, all brick required for blast furnace lining; Marietta Glass Co., Indianapolis, a large order for glass furnace construction; H. C. Frick Coke Co., all brick required for 264 bee-hive ovens; Republic Iron & Steel Co., all brick required for 100 bee-hive ovens; Washington Coal & Coke Co., one million brick; Copper Queen Mining Co., Dawson, N. Mex., 400,000 brick for coke ovens; Hostetter Connellsville Coal & Coke Co., 500,000 brick; National Cement Co., Eastern N. J., all brick required for lengthening 16 kilns, etc. The high pressure at which industrial establishments are being operated shows no signs of abatement; in fact, the insistent demand is increasing month by month, as shown by the fact that the orders received in February are 25% larger in tonnage than those received in January and nearly double the tonnage in September, 1905. February orders were the largest ever received in the history of the Refractories company during the past four years, and those received to date, in March, are in excess of those received for a corresponding period in February.

For other Proposal Advertisements see pages 43, 44, 45, 46, 47, 48, of Advertisements and Construction News page 130.

FURNISHING A DREDGING PLANT.

Department of Public Works of the Republic of Cuba.
Office of the District of Matanzas.
Matanzas, Cuba, March 28th, 1906.

Sealed proposals will be received until two P. M., Wednesday the 6th of June, 1906, at the office of Public Works, corner of Santa Isabel and Compostela Sts., Matanzas, Cuba, for furnishing to the Government a Dredging Plant, composed of a dredge with an 8-yard shovel and steel hull; four wooden scows of 500 cubic yards capacity each; one steel steam tug, a duplicate of the Ignacio Agramonte (before, the Narciso Deulofeu, to-day in service in the District of Public Works of Havana); one wooden coaling barge of 200 tons; one wooden floating water tank of 42,500 gallons; one steel floating derrick of 40 tons, and one naphtha launch of 20 horsepower.

The bids will be opened and read at the time and date before mentioned. Specifications, blank forms and all necessary information furnished at this office and at the General Direction of Public Works, Arsenal, Havana.

SALVADOR GUASTELLA,
Chief Engineer.
14-9t

STEAM ROAD ROLLER.

Sealed proposals for furnishing the City of Melrose, Public Works Department, one "fifteen-ton" steam road roller of the 3 wheel type, double cylinder, to weigh in metal not less than 35,000 lbs., rear axle to be 6 inches in diameter, and crank shaft not less than 3½ inches in diameter; also for one sectional road scraper and one street sweeper, will be received by the Engineer and Superintendent of Public Works of said City at his office City Hall Building, Melrose, Mass., until twelve (12) o'clock noon, Monday, April 16, 1906, at which time and place all persons competing are invited to be present.

The proposals will then be opened and read, and no proposals will be received after the aforesaid time and date, except upon the rejection of all the proposals then presented.

Each proposal must be accompanied by a certified check for One Hundred (100) Dollars, payable to the City of Melrose, which check will be returned to the person making the same within three days after the contract is awarded, except the same is forfeited on the part of the bidder by a failure to enter into a contract to deliver the goods on which bid was made.

The said Engineer and Superintendent reserves the right to reject any or all proposals should he deem it for the best interests of the City of Melrose so to do.

W. DABNEY HUNTER,
Engr. & Supt. Public Works.
Melrose, Mass., April 3, 1906. t 14-1t

PIPE LINES.

Bayonne, N. J.

Sealed proposals will be received and opened by the Council of the City of Bayonne, N. J., at a meeting to be held at the City Hall on Tuesday, April 17th, 1906, at eight o'clock P. M. for all of the labor and material for constructing a cast-iron water pipe line on 22d and Avenue J., etc., as per resolution of the Council passed April 3d, 1906.

There will be required about 1,720 ft. of 16-inch pipe, 870 ft. of 12-inch pipe, 50 ft. of 8-inch pipe and 130 ft. of 6-inch pipe, together with valves, hydrants and other appurtenances.

All bids must be on the regular forms provided for the purpose. Plans and specifications for the work are on file in the office of the City Surveyor, where blank forms for proposals or any further information can be obtained.

The amount of bond for the faithful performance of the work is $[illegible], and the time allowed for completion is [illegible] days.

The Council reserves the right to reject any or all bids.

W. C. HAMILTON, City Clerk.
F. W. DALRYMPLE, City Surveyor. 14-2t

BRICK PAVING.

West Tampa, Fla.

The Board of Bond Trustees of West Tampa, Fla., will receive sealed proposals until 4 p. m., April 25th, 1906, for a sufficient quantity of vitrified paving brick to pave 30,000 sq. yds. of streets.

Prices given in bids to mean f. o. b. cars at West Tampa, Fla.

The Board reserves the right to reject any or all bids.

GEO. N. BENJAMIN,
Chairman of Board of Bond Trustees.
14-3t

CONCRETE ARCH BRIDGE.

County Controller's Office,
Reading, Pa., April [illegible]th, 1906.

Sealed proposals will be received at this office up to 10 a. m., Friday, April 20th, 1906, for building a Concrete Arch Bridge over the Morlattin Creek at a point where the public road known as the Perkiomen Turnpike crosses said creek, three-quarters of a mile west of Douglassville, Berks County, Pa., according to plans and specifications on file in the office of the County Commissioners at Reading, Pa. All bids must be accompanied by a certified check equal to 10% of the aggregate amount of the bid. The right is reserved to waive defects, to reject any or all bids or part of bids.

H. F. LIVINGOOD,
County Controller.
14-1t

PUMPING ENGINE.

Bowling Green, Ky., April 3, 1906.

Sealed proposals will be received by the Board of Public Works and Common Council of the City of Bowling Green, Kentucky, until two o'clock, P. M., on Thursday, April 26th, 1906, for furnishing and installing complete with foundations and connections one Three Million gallon Pumping Engine of from 90 to 120 million duty.

Proposals may be made on Crank and Fly-Wheel, Direct-acting, or Compensated types of machine, with either compound or triple expansion steam cylinders. Machine must be of vertical type.

A certified check for $1,000.00, payable to City of Bowling Green, Ky., deposited with Wm. Carr, Treasurer, will be required with each proposal.

Specifications may be obtained by addressing the Consulting Engineer, Granberry Jackson, C. E., Nashville, Tenn., or the City Engineer, E. P. Harris, Bowling Green, Ky. The right is reserved to accept or reject any or all bids.

GEO. T. WILSON, Mayor.
W. H. PHILIPS, City Clerk.
14-3t

U. S. ENGINEER OFFICE, Jacksonville, Fla., April 2, 1906.—Sealed proposals for dredging at Dames Point Shoal, St. Johns River, Fla., between Jacksonville and Mayport, will be received here until 12 o'clock noon, April 23, 1906, and then publicly opened. Information on application. FRANCIS R. SHUNK, Maj., Engrs. 14-3t

SITUATIONS OPEN

MECHANICAL DRAFTSMAN, about 25 or 30 years old; salary $90 or $100 a month; state experience and education. Address "O. B. 14," Engineering News, New York. 14-1t

WANTED—Several first-class structural detailers and checkers. HAY FOUNDRY & IRON WORKS, Newark, N. J. 14-3t

DRAFTSMEN — Experienced in structural and mechanical work. Positions permanent for good men. State experience and salary expected. Address "M. B. 14," Engineering News, New York. 14-3t

WANTED.—Rodman, draftsman and chainman on tunnel construction in New York City. Technical training required of rodman and draftsman. Address written application to "X. A. 13," Engineering News, New York. 14-1t

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ONE DOUBLE-CYLINDER, DOUBLE-DRUM
HOISTING ENGINE
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